# PEP Field Data Sheet for BGI PQ200A PEP Event Type: PRM PM-2.5 PM-Coarse

Sampling Event Information					
AQS Site ID	A254		Setup Date 10/15/		
Site Name XRA		Primary SLT Sar	mpler Serial No.	NA	
PEP Field Scientist M, (	nou	PEP PQ200A Serial No.		595	
Parameter Check Device	Make/ Mod	el	Se	rial No.	
Multi-Standard <sup>1</sup>	BCF With	i Cel	00/9	47	
Temperature Standard			,		
Barometric Pressure Standard		une			
Flow Rate Standard		·			
Time Checks OK?	✓Yes □ No (describe)			i	
Monitoring Site Criteria OK?	-TYes □ No (describe)				

 $<sup>^{1}</sup>$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date: 10/15/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	99 cmH <sub>2</sub> O	lo∂ cmH <sub>2</sub> O	□Yes □No
Bar, Pressure	Criteria	Ref Standard	Sampler.	Verification OK?
Ambient	± 10 mmHg	758 mmHg	755 mmHg	ØYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	± 2°C	16.7 °C	16.7 ℃	EYes □No
Filter Sensor	<u>±</u> 2°C	17,0 °C	17,4 °C	ØYés □No
		Flow Rate Veri	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	16,78 Lpm	16 70 Lpm	- □Yes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Ŏ" Check	15.83 ≤ Q ≤ 17.50	16,78 Lpm	16.67 Lpm	~∐Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Ex	oosure Data	
Filter Cassette ID	2324	Cassette Retrieval Date/Time:	
PM Cut Point	PM-2.5 □ PM-10	16:42 (0117/12	, ~
Elapsed Time (ET)	23:59	Filter Integrity OK? \$\text{\$\partial}\text{\$\partial}\text{Yes}	□ No (describe)
Total Volume (m³)	ZY. 07		
Flow Rate (Lpm)	Q: 16.7	Avg: 16.70	cv: 0,12
Start Date/Time	10/16/12 0:00	Data Download OK? ☐ Yes	☐ No (describe)
Stop Date/Time	10/17/12 0:00		
Temperature (°C)	Max: ZY-Z	Min: X, Y	Avg: 15.8
Bar. Pressure (mm Hg)	Max: 757	Min: 757	Avg: 755
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID <sup>4</sup>		EN IDITIE	
Collocated Cassette ID(s)5			
Collocated Cassette ID(s)			

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

 $<sup>^4</sup>$  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody Filter Cassette No. 2324 Cassette Type **BGI Sampler Cassette** PART I - WEIGHING LABORATORY T2636124 Filter ID No. Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox Shipment Date 10/11/2012 Shipment Date Sent to (PE Org) OUT-101112 Airbill No. Date This Filter Must be Used by: R Normally, the weighing laboratory completes Part I, keeps 1 copy and send Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 <u>6.</u> NOAA Received by: Date Received: 10/11/17 Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: M, Crinine Site Name & Description Primary SLT PM-2.5 Sampler SeriaLNo.: Make/Model: 10/8/12 Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: ) ( Retrieval Date: Time: jo:'Ч'こ Event Filter Integrity: ➤ OK □ Reject (describe) Sample Type `⊠/RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: "™PM-2.5 □ PM-10 PM-2.5 Separator Type: ➤ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Affiliation: USEVA Shipment Date 10 1917 Shipped by 6. NON LAB Shipping Destination: ((U Tracking No. N A Shipping Company: N/A-On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °C Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient

Integrity OK? The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

Max Temperature:

☐ Yes ☐ No

Sampling Event Information

Make/ Model

☐ PM-Coarse

Primary SLT Sampler Serial No.

PEP PQ200A Serial No.

Setup Date

Serial No.

**PEP Event Type:** ☐ FRM PM-2.5

Dry 10/15/12

Crowne

\*Yes

. 0,	1100 C	ر ال	1.12 / Q
Bar. Pressure (mm Hg)	Max: 758	Min: 784	Avg: 755
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	-
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID <sup>4</sup>		(m) 10 links	,
Collocated Cassette ID(s)5			
		utside of 1380- 1500 minute range.	
<sup>4</sup> For PM-coarse sampling even	t, if PM-2.5 is routine filter type,	then list the companion PM-10 filte	er cassette ID and vice versa.
<sup>5</sup> For parking lot studies, all the	e IDs can be listed on one form. E	Daming 1. Page 1016 4 1 4	
Notes:	D 11	FAW / / //	for Dranets on

▼Yes □ No (describe)

□ No (describe)

PQ	Date: /2/15/12_			
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	98 cmH₂O	99 cmH <sub>2</sub> O	∕ÚYes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	7 <i>5</i> 7 mmHg	756 mmHg	₽Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	16.6 °C	17.∫ °C	ÐYes □No
Filter Sensor	<u>±</u> 2°C	16-6 °C	18,2 ℃	□Yes □No
		Flow Rate Veri	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	16.68 Lpm	16,70 Lpm	TYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Deşign	Verification QK?
"Q" Check	15.83 ≤ Q ≤ 17.50	16-68 Lpm	16.67 Lpm	□Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exposure Data				
Filter Cassette ID		Cassette,Retrieval Date/Time:			
PM Cut Point	□ PM-2.5 □ PM-10 75F	10/17/12 10:49			
Elapsed Time (ET)	10/16/12 0:00	Filter Integrity OK? □ Yes □ No (describe)			
Total Volume (m³)	10/17/12 0:00				
Flow Rate (Lpm)	Q; 16.7	Avg: 16.71 CV: 0, 47			
Start Date/41116	23:59 23:59	Data Download OK?			
Stop Date/Time	ZY.03				
Temperature (°C)	Max: "Z" "乙	Min: 8.5 Avg: 15.8			
Bar. Pressure (mm Hg)	Max: 758	Min: 754 Avg: 755			
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :			
Trip Blank Cassette ID		Field Flags:			
Companion Cassette ID <sup>4</sup>		silvilos a			
Collocated Cassette ID(s) <sup>5</sup>					

AQS Site ID

PEP Field Scientist M.

**Parameter Check Device** 

Multi-Standard<sup>1</sup> Temperature Standard Barometric Pressure Standard Flow Rate Standard

Monitoring Site Criteria OK?

Time Checks OK?

Site Name

Day 4 Collocated

FILTER.

Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** 2186 Filter Cassette No. **BGI Sampler Cassette** Cassette Type PART I - WEIGHING LABORATORY Filter ID No. T2636127 Filter Weighing and Shipping Informatio Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Shipped by Judy Maddox **Shipment Date** 10/11/2012 Shipment Date Sent to (PE Org) Airbill No. OUT-101112 Date This Filter Must be Used by: Re Normally, the weighing laboratory completes Part I, keeps 1 copy and sends Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: 10 11 202 Received by: Package Condition: ➤ Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information PEP Field Scientist: M, CROWS Arrival Date at Site Site Name & Description Primary SLT PM-2.5 Sampler Mäke/Model: Serial No.: 101812 Serial No.: Primary SLT PM-10 Sampler Make/Model: POC: AQS Site ID Other Operators or Observers Sampling Event Filter Data Sampling Date: 101 Retrieval Date: 10/7/ 10:49 Time: Event Filter Integrity: CK CR Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 □ PM-10 ~ PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date 10 1917 Affiliation: \) \ Shipped by 6 NOAH Shipping Destination: LM Tracking No. Shipping Company:

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART V - WEIGHING LABORATORY

Date Received	III O LIDORIIO	Received by:			Integrity Flag:	
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	°C	Cold Pack Condition:	☐ Frozen ☐ Cold ☐ A	Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

	PEP Event Type: U FRM PM	<i>I</i> I-2.5 □ PM-C	parse PM	3	
Sampling Event Information					
AQS Site ID Y	H 104		Setup Date	10/15/12	
Site Name YBA		Primary SLT Sampler Serial No.		R/A	
PEP Field Scientist M	Crown	PEP PQ:	200A Serial No.	592	
Parameter Check Device	Make/ Mode	1 /	Se	rial No.	
Multi-Standard <sup>1</sup>	BGI Delta	Cal	00/	97	
Temperature Standard		,			
Barometric Pressure Standard	(in)	10K/17			
Flow Rate Standard		ے در وہ بی			
Time Checks OK?	Ø∕Yes □ No (describe)				
Monitoring Site Criteria OK?	□ Yes □ No (describe)			A	
Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.					

PQ200A PEP Sampler Verification Checks <sup>2</sup>				Date: 10/15//2
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	96 cmH <sub>2</sub> O	96 cmH₂O	☐Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	757 mmHg	75/ mmHg	⊟Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	± 2°C	16.5 °C	16.9 °C	⊟Yes □No
Filter Sensor	<u>±</u> 2°C	16.8 ℃	17,9 °C	⊟Yes □No
		Flow Rate Veri	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	16. 7 Lpm	16-67 Lpm	⊠Yes □No
Design Flow Rate	Criteria ( <u>±</u> 4%)	Ref Standard	Design	Verification OK?
"Ŏ" Check	15.83 ≤ Q ≤ 17.50	16.91 Lpm	16.67 Lpm	⊡Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Ex	posure Data	
Filter Cassette ID 4	8413	Cassette Retrieval Date/Tim	
PM Cut Point □	PM-2.5 4 PM-10	1017/12 1013	<b>3</b> 8
Elapsed Time (ET)	23:59	Filter Integrity OK?	Yes □ No (describe)
Total Volume (m <sup>3</sup> )	Z4,004		,
Flow Rate (Lpm) Q:	16.7	Avg: 16.71	cv: Ø, Y <u>3</u>
Start Date/Time 10	118 10.00	Data Download OK?	Yes □ No (describe)
Stop Date/Time 10	117/12 6:00		. ,
Temperature (°C) Ma	ax: 24.4	Min: 8.4	Avg: 15.8
Bar. Pressure (mm Hg) Ma	ax: 754	Min: 744	Avg: 751
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags: P	
Companion Cassette ID <sup>4</sup>	The state of the s	(1010)	112
Collocated Cassette ID(s) <sup>5</sup>	•	(3)	1

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F Filter Cassette No. : 8413 Cassette Type BGI Sampler Cassette PART I - WEIGHING LABORATORY Filter ID No. T2636142 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian T Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Sh Airbill No. OUT-101112 Date This Filter Must be Used by: Reti Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 Sent to (PE Org) R-4, Greg Noah PART II – FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID BA109 POC: 1 Other Operators or Observers Sampling Event Filter Data Retrieval Date: Sampling Date: 10:38 Time: Event Filter Integrity: DOK Reject (describe) Sample Type PRO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) CO - Collocated PEP □ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 □ PM-10 PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date Affiliation: USENA C. Noah Shipped by Shipping Destination: RYLAB Shipping Company: Tracking No. On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °c l Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient ☐ Yes ☐ No Max Temperature: Integrity OK?

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: ☐ FRM PM-2.5 ☐ PM-Coarse — T S P						
	Sampling Event Information					
AQS Site ID YBA	TSP4		Setup Date	10/15/12		
Site Name YBA		Primary SLT Sar	mpler Serial No.	NA		
PEP Field Scientist M. (	Notice_	PEP PQ:	200A Serial No.	588		
Parameter Check Device Make/		el Serial No		rial No.		
Multi-Standard <sup>1</sup>	BCI Delta C	al.	00197			
Temperature Standard	parente de la companya del companya de la companya del companya de la companya de					
Barometric Pressure Standard	Section of the Sectio	G 10	15/12			
Flow Rate Standard		- Class Mark Way Care a	of a 2 33 of the Australian Street, and the st			
Time Checks OK? □ Yes □ No (describe)			,			
Monitoring Site Criteria OK? ☑ es □ No (describe)						
Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.						

PQ	PQ200A PEP Sampler Verification Checks <sup>2</sup>			
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	<i>O98</i> cmH₂O	$\bigcirc$ 98 cmH <sub>2</sub> O	ØYes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	7 <i>5</i> 7 mmHg	755 mmHg	⊟Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	17,8 °C	17.9 °C	⊠Yes □No
Filter Sensor	<u>±</u> 2°C	17.8 °C	18,5 °C	₽Yes □No
		Flow Rate Ver	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	17-18 Lpm	16,80 Lpm	BYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Ŏ" Check	15.83 ≤ Q ≤ 17.50	17./8 Lpm	16.67 Lpm	□Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

PEP Exposure Data						
Filter Cassette ID	Cassette Retrieval Date/Time:					
PM Cut Point	□ PM-2.5 □ PM-10 TSP	IDIOIR IOLY)				
Elapsed Time (ET)	23:59	Filter Integrity OK? Yes D No (describe)				
Total Volume (m <sup>3</sup> )	21.02					
Flow Rate (Lpm)	l	Avg: 16.70 CV: 0.46				
Start Date/Time	10/16/12 0:00	Data Download OK? ☐ Yes ☐ No (describe)				
Stop Date/Time	1017/12 0:00					
Temperature (°C)	Max: 24,2	Min: 8, 4 Avg: 15,9				
Bar. Pressure (mm Hg)	Max: '75-7	Min: 753 Avg: 755				
Field Blank Cassette ID	2062	Sampler Flags <sup>3</sup> :				
Trip Blank Cassette ID		Field Flags:				
Companion Cassette ID <sup>4</sup>		en igilis				
Collocated Cassette ID(s) <sup>5</sup>						

Notes: WATER DREPS NOTED ON FICTER.

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F Filter Cassette No. 10275 BGI Sampler Cassette Cassette Type PART I - WEIGHING LABORATORY Filter ID No. T2636123 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian ٦ Shipped by Judy Maddox **Shipment Date** Shipment Date 10/11/2012 Sent to (PE Org) Sh Airbill No. OUT-101112 Date This Filter Must be Used by: Reti Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: Package Condition: Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information PEP Field Scientist: Arrival Date at Site Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No .: م Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID Y 13 A POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: 10 Time: Event Filter Integrity: ₽OK □ Reject (describe) Sample Type □ Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 □ PM-10 PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB USEI **Shipment Date** Affiliation: Shipping Destination: Shipped by 00 Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °C │Cold Pack Condition: 🛘 Frozen 🗘 Cold 🗘 Ambient Max Temperature: ☐ Yes ☐ No Integrity OK?

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody I Filter Cassette No. Cassette Type **BGI Sampler Cassette** PART I - WEIGHING LABORATORY Filter ID No. T2636126 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox **Shipment Date** Shipment Date 10/11/2012 Sent to (PE Org) SI OUT-101112 Airbill No. Date This Filter Must be Used by: Ref Normally, the weighing laboratory completes Part I, keeps 1 copy and sends I Sent to (PE Org) R-4, Greg Noah PART II – FIELD OFFIÇE This Filter Must be Used by: 11/10/2012 Received by: Date Received: 10 Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Crowe Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: Time: 10:47 Event Filter Integrity: K ☐ Reject (describe) Sample Type FB - Field Blank (RO Cassette ID: 10275 ☐ RO - Routine □ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 ☐ PM-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB **Shipment Date** Affiliation: USE Shipped by Shipping Destination: // Noce Tracking No. Shipping Company:

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART V - WEIGHING LABORATORY

Date Received		Received by:			Integrity Flag:
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	°C	Cold Pack Condition:	☐ Frozen ☐ Cold ☐ Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

# PEP Field Data Sheet for BGI PQ200A PEP Event Type: FRM PM-2.5 PM-Coarse

Sampling Event Information

Sotup Dato

ANS SITA ID I YRR 75

7.40 010	1 2 3	<u>-2) [</u>					Cetup Date	10//2/ /
Site Na	1200				Primary SLT Sampler Serial No.		N/H	
PEP Field Scien	tist M, C	10 W	2		PEP PQ200A Serial No.		587	
Parameter Che	ck Device		Make/ N	/lo/d <del>g</del>	1 ,		Se	rial No.
Multi-Stand	dard <sup>1</sup>	15	GI De	/fc	· Cs/		001	97
Temperature S	Standard							T and the
Barometric Pressu	ıre Standard							
Flow Rate St	andard							
Time	Checks OK?	₽ Yes	-□ No (describe)					
Monitoring Site	Criteria OK?	u Yes	□ No (describe)			, e	, y 16 ° 16 ° 17 ° 18 ° 18 ° 18 ° 18 ° 18 ° 18 ° 18	
<sup>1</sup> Use this line for mult	ti-standard instr	uments (e	e.g., BGI TriCal and	d Deli	aCal) when used fo	r all	three checks.	
PQ2	200A PEP S	ample	r Verification	Che	cks <sup>2</sup>		Date: /	0/15/17
Leak Check	Criteri	а	Beginning F	n	Ending P	<b>-</b>	<b>y</b> eri	fication OK?
2-Minute Interval	Change < 5	cmH <sub>2</sub> O	-075 cirh	И <sub>2</sub> О	097 99ml	I <sub>2</sub> O	DYes □N	0
Bar. Pressure	Criteri	a	Ref Standard	d	Sampler		Veri	fication OK?
Ambient	<u>±</u> 10 mm	Hg	75% mn	nHg	759 mm	ιHg	ÛYes □N	0
Temperature	Criteri	а	Ref Standard	d	Sampler		Veri	fication OK?
Ambient Sensor	<u>±</u> 2°C		15,1	°C	15.2	°C	Yes ON	0
Filter Sensor	<u>±</u> 2°C		15.2	°C	15.3	°C	ŮYes □N	<del></del>
Flow Rate Verification								
Audit Standard	Criteri	а	Ref Standard	d	, Şampler		Veri	fication OK?
FR (Cal.) Check	< 4% differ	ence	16,90 1	_pm	16-67 L	.pm	Yes □N	0
Design Flow Rate	Criteria (±	:4%)	Ref Standard	d	Design		√Veri	fication OK?
"Q" Check	15.83 ≤ Q ≤	17.50	16 90 1	_pm	16.67 L	.pm	'dYes □N	0
<sup>2</sup> Indicate only the fina below and/or in the fie a sampling event. Fill	eld notebook.  If	`troublesl	nooting is unsucces.	sful, ti	he sampler must be	nt tre recai	oubleshooting librated or rep	in the "Notes" section aired before conducting
			PEP Exp	osui	e Data			
Filter Cas		468		Cassette Retrieval Date/Time:				
	ut Point 🛮 PI		□ PM-10		122 10/16	110	? <del>-</del>	
	me (ET)   <u>공</u> 종			Filter	Integrity QK?	[PI	Yes 🗆 No	(describe)
Total Volui			3					
	e (Lpm) Q: 1			Avg: 16.70 CV: 0, 44				
Start Date/Time 10 (16/12 0):00			Data Download OK? X Yes □ No (describe)					
Stop Date/Time 10 (17) 12 0:00								
Temperature (°C) Max: 'Z3, 4		Min:	<u>4, 6</u>	,	Avg:	15.8		
Bar. Pressure (mm Hg) Max: 760			Min: "	1 50		Avg:	/ン8	
Field Blank Cassette ID  Trip Blank Cassette ID			•	oler Flags <sup>3</sup> :				
Companion Cass		<u> 5</u>		rield	Flags:			
Collocated Cassett			1817(12		Contract of the Contract of th			
		mlov Fi	ra" if marking in	+n; d -	£1290 1500:	(o.e		······································
	Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range. For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.							

valid. Had to plug laptop into outlet.

<sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

# **PEP Chain-of-Custody**

PEP Cha	ain-ot-Cus	stody	Filter Cassette No.	8468	
			Cassette Type	BGI Sampler Cassette	
PART I – WEIGHING LABORAT		A _ * * * * * * * * * * * * * * * * * *	Filter ID No.	T2636128	
Filter Weighing a	nd Shipping In	nformatic	Weighing Lab	PM2.5 Laboratory	
Filter ID			Analyst Name	Maddox	
	Weighing Lab			10/11/2012	
Analyst/Custodian			Weighing Date Shipped by	Judy Maddox	
Shipment Date					
Sent to (PE Org)			Shipment Date	10/11/2012	
<u>Date This Filter Must be Used</u>		Re	Airbill No.	OUT-101112	
Normally, the weighing laboratory comp	letes Part I, keeps 1 ce	opy and sends	Sent to (PE Org)	R-4, Greg Noah	
PART II – FIELD OFFICE			This Filter Must b	e Used by: 11/10/2012	
Date Received: 16/11/12	Received	by: 💪 N	CA4		
Package Condition: Good	• • •				
if rejected, the filter cassette should i PART III – FIELD SITE	зе гештеа то те w	eigning iaborai	ory with the next outgoin	ig snipment.	
TAXT III – FIELD SITE	Sampl	ing Event I	nformation		
Arrival Date at Site	10/15/12	mg = vont i	PEP Field Scie	ntist: M, Claws	
Site Name & Description	YBB		1. 2. 1.1014 0010	THE THE CHORE	
	Make/Model:		Serial New No.	118/12	
	Make/Model:		Serial No.:	STOLE	
AQS Site ID	YBB 254		POC:		
Other Operators or Observers	100 00	-		-	
	Samp	ling Event	Filter Data		
Sampling Date: 10/16/17		Retrieval Date		Time: 9: 22	
· · · · · · · · · · · · · · · · · · ·	 ∃ Reject (describe	<u> </u>	. (10)	•	
Sample Type					
<b>≱</b> RO - Routine □ F	B - Field Blank (R	O Cassette ID	) 🗆 (	Other (describe)	
	xpired Filter (not ι			,	
☐ TB - Trip Blank (last RO Cass	sette ID used in au	udit trip:	)		
□ Void (why?)		•	,		
· · · · · · · · · · · · · · · · · · ·	PM-10	PM-2.5 Sepa	rator Type: ☐ WINS	□ VSCC	
PART IV - FIELD FILTER SHIP			111120	<del></del> -	
Shipment Date 10/19/12 Affiliation: (CU USEA)					
Tracking No. $  N/A  $ On completion of Part II-IV, the field	d scientist beens one	Shipping Con		to the laboratory with the filter	
PART V – WEIGHING LABORA	=	. сору ина вениг	s are rop (original) copy.	о не шоныму чин не јшег.	
Date Received	Received by:			Integrity Flag:	
Shipment D.V. D.N.			Cold Pack Condition:	☐ Frozen ☐ Cold ☐ Ambient	
Integrity OK?	max rompore	0	Local don condition.	LITOZETI LI COIG LI ATTIDIETIL	

Filter Weighing and Shipping Information

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

P	'EP Event Type: U FRM P	M-2.5 □ PM-C	oarse	10				
	Sampling Event Information							
AQS Site ID YBB	.104		Setup Date	10/15/12				
Site Name YBB		Primary SLT Sar	npler Serial No.	NA				
PEP Field Scientist M (	Crowe	PEP PQ	200A Serial No.	590				
Parameter Check Device	Make/ Mode	el ,	Se	rial No.				
Multi-Standard <sup>1</sup>	BOI Delfa Cel		O0 / 9	7				
Temperature Standard				1				
Barometric Pressure Standard								
Flow Rate Standard	/							
Time Checks OK?	☑ Yes □ No (describe)			19 (19 (19 (19 (19 (19 (19 (19 (19 (19 (				
Monitoring Site Criteria OK?	☐Yes ☐ No (describe)							

<sup>&</sup>lt;sup>1</sup> Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ:	PQ200A PEP Sampler Verification Checks <sup>2</sup>				
Leak Check	Criteria	Beginning P	Ending P	Verification OK?	
2-Minute Interval	Change < 5 cmH₂O	108 cmH₂O	lO8 cmH₂O	₽Yes □No	
Bar, Pressure	Criteria	Ref Standard	Sampler	Verification OK?	
Ambient	<u>±</u> 10 mmHg	758 mmHg	755 mmHg	□Yes □No	
Temperature	Criteria	Ref Standard	Sampler	Verification QK?	
Ambient Sensor	± 2°C	75,5 °C	14.5 °C	TYes ONo	
Filter Sensor	<u>±</u> 2°C	15,4 °C	15.5 °C	'□Yes □No	
		Flow Rate Veri	fication		
Audit Standard	Criteria	Ref Standard	Sampler	Yerification OK?	
FR (Cal.) Check	< 4% difference	16,8 Lpm	16.6/ Lpm	Û¥es □No	
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?	
"Q" Check	15.83 ≤ Q ≤ 17.50	ل کے اور ال Lpm	16.67 Lpm	⊟Yes □No	

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP EX	osure Data
Filter Cassette ID	2095	Cassette Retrieval Date/Time:
PM Cut Point	□ PM-2.5 🖺 PM-10	9:25 10/17/12
Elapsed Time (ET)	23:59	Filter Integrity OK? ⊠∕Yes □ No (describe)
Total Volume (m³)	24:03	
Flow Rate (Lpm)	Q: 16.7	Avg: 16.70 CV: 0.50
Start Date/Time	10/16/12 10:00	Data Download OK? Poyes □ No (describe)
Stop Date/Time	10/17/12 \$:80	
Temperature (°C)	Max: 23,2	Min: 8.7 Avg: 15.4
Bar. Pressure (mm Hg)	Max: 757	Min: 752 Avg: 754
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :
Trip Blank Cassette ID		Field Flags:
Companion Cassette ID <sup>4</sup>		And the same of th
Collocated Cassette ID(s)5	(30 10/17/12	

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody Filter Cassette No. 2095 Cassette Type BGI Sampler Cassette PART I - WEIGHING LABORATORY Filter ID No. T2636130 Filter Weighing and Shipping Informati Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox **Shipment Date** Shipment Date 10/11/2012 Sent to (PE Org) Airbill No. OUT-101112 Date This Filter Must be Used by: Normally, the weighing laboratory completes Part I, keeps 1 copy and send Sent to (PE Org) R-4, Greg Noah This Filter Must be Used by: PART II – FIELD OFFICE 11/10/2012 Received by: Date Received: 10 Package Condition: ,□ Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment, PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Crowe Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No. AQS Site ID POC: 10 Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: Time: 0925 Event Filter Integrity: 🖫 🕏 K ☐ Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: □ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 ₽ PM-10 PM-2.5 Separator Type: □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date Affiliation: Shipped by Shipping Destination: Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY **Date Received** Received by: Integrity Flag: Shipment °C Cold Pack Condition: □ Frozen □ Cold □ Ambient Max Temperature: ☐ Yes ☐ No Integrity OK?

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

Р	'EP Event Type: ⊔ FRM PI	M-2.5 ⊔ PM-Coa	rse 7	5/2
	Sampling Event I	nformation		
AQS Site ID	BB TSP 4	Setup Date 10/15/12		
Site Name XBB		Primary SLT Sampler Serial No.		XVA-
PEP Field Scientist Mr. C	roue	PEP PQ20	0A Serial No.	597
Parameter Check Device	Make/ Mode	) <b> </b>	Se	rial No.
Multi-Standard <sup>1</sup>	BCoI Delta	Cal	00	197
Temperature Standard		,		
Barometric Pressure Standard				
Flow Rate Standard				
Time Checks OK?				
Monitoring Site Criteria OK?	□ Yes □ No (describe)			
Use this line for multi-standard instr	ruments (e.g., BGI TriCal and Del	taCal) when used for a	ll three checks	- 12 100 g - 15 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15

PQ	Date: 10/15/12			
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	98 cmH₂O	99 cmH₂O	ØYes □No
Bar, Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	758 mmHg	755 mmHg	©Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	15,3 °C	14,2 °C	BYes □No
Filter Sensor	<u>±</u> 2°C	15,3 °C	/5./ °C	-EYes □No
		Flow Rate Veri	fication	41 100
Audit Standard	Criteria	Ref Standard	Sampler	/ Verification OK?
FR (Cal.) Check	< 4% difference	16,88 Lpm	16.70 Lpm	ØYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	/ Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	16,88 Lpm	16.67 Lpm	প্Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exp	oosure Data
Filter Cassette ID	5323	Cassette Retrieval Date/Time:
PM Cut Point	□ PM-2.5 □ PM-10 7S/	9:29 10/17/12
Elapsed Time (ET)	723:59	Filter Integrity OK? ⊠Yes □ No (describe)
Total Volume (m³)	24,03	
Flow Rate (Lpm)	Q: 16.7	Avg: 670 CV: 3,49
Start Date/Time	10/16/12 0:00	Data Download OK? ⊠Yes □ No (describe)
Stop Date/Time	10/17/12 0:00	,
Temperature (°C)	Max: 22,9	Min: 8,5 Avg: \5.3
Bar. Pressure (mm Hg)	Max: 756	Min: 752 Avg: 754
Field Blank Cassette ID		Sampler Flags <sup>3</sup> .
Trip Blank Cassette ID	The second secon	Field Flags:
Companion Cassette ID4	GN 10/17/12	And the second s
Collocated Cassette ID(s) <sup>5</sup>		

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

 $<sup>^4</sup>$  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F 5323 Filter Cassette No. BG1 Sampler Cassette Cassette Type PART I - WEIGHING LABORATORY Filter ID No. T2636134 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Tε Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Shir Airbill No. OUT-101112 Date This Filter Must be Used by: Retur Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 c Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: 10 Received by: Package Condition: ☐ Good ☐ Reject (Whv?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No .: Primary SLT PM-10 Sampler Make/Model: Serial No.: YBB TSP4 POC: AQS Site ID Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: Time: (7) Event Filter Integrity: ☐ OK ☐ Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: □ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: □ PM-2.5 □ PM-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB **Shipment Date** Affiliation: USE Shipped by Noal Shipping Destination: Shipping Company: Tracking No. On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment

Integrity OK? 

Yes 
No 
Max Temperature: 
C Cold Pack Condition: 
Frozen 
Cold 
Ambient 
The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: ☐ FRM PM-2.5 □ PM-Coarse (DY) (C) Sampling Event Information AQS Site ID Setup Date Site Name Primary SLT Sampler Serial No. PEP Field Scientist PEP PQ200A Serial No. Parameter Check Device Make/ Model Serial No. Multi-Standard<sup>1</sup> (A) 19 Temperature Standard Barometric Pressure Standard Flow Rate Standard Time Checks OK? Byes □ No (describe) Monitoring Site Criteria OK? Navyes □ No (describe)

 $<sup>^{</sup>l}$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date: 10/17/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	97 cmH₂O	9% cmH <sub>2</sub> O	r Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	つら7 mmHg	750 mmHg	"∭XYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	ZZ.Y °C	Z1.7 °C	XEYes □No
Filter Sensor	<u>±</u> 2°C	S.2.8 °C	55'3 °c	7AYes □No
	7.	Flow Rate Veri	fication	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	6.70 Lpm	GA Lpm	Yes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	16.93 Lpm	16.67 Lpm	)≊Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exp	osure Data	
Filter Cassette ID	5129	Cassette Retrieval Date/Ti	
PM Cut Point	□ PM-2.5 ¬PM-10	10/18/12 12:2	<
Elapsed Time (ET)	24:00	Filter Integrity OK?	∆Yes □ No (describe)
Total Volume (m <sup>3</sup> )	ZY, Ø3		, ,
Flow Rate (Lpm)	Q: 16.7	Avg: 16.71	cv: 0,54
Start Date/Time	10/17/12 12:00	Data Download OK?	Yes DNo (describe)
Stop Date/Time	10/18/12 12:00		
Temperature (°C)	Max: 27.8	Min: 16.9	Avg: 71, 6
Bar. Pressure (mm Hg)	Max: 750	Min: 744	Avg: 747
Field Blank Cassette ID	10424	Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID4	(S)		
Collocated Cassette ID(s)5	10/18/12		

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

 $<sup>^4</sup>$  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** Filter Cassette No. 5129 Cassette Type **BGI Sampler Cassette** Filter ID No. T2636139 PART I – WEIGHING LABORATORY Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Airbill No. OUT-101112 R Date This Filter Must be Used by: Sent to (PE Org) R-4, Greg Noah Normally, the weighing laboratory completes Part I, keeps I copy and send This Filter Must be Used by: 11/10/2012 PART II – FIELD OFFICE Received by: Date Received: 10 Package Condition: ☐ Good ☐ Reject (Whv?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No AQS Site ID 105 POC: Other Operators or Observers Crowe Sampling Event Filter Data Sampling Date: Retrieval Date: Time: Event Filter Integrity: ☐ Reject (describe) Sample Type **№**RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) ☐ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: □ PM-2.5 **₾ P**M-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date Affiliation: USENA Shipped by Shipping Destination: Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment Max Temperature: ٥С Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient ☐ Yes ☐ No Integrity OK?

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

# **PEP Chain-of-Custody**

			-	-			•	1
						Cassette Type	BGI Sampler Cassette	
PART I - WEIGHING		1 1 March 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Filter ID No.	T2636136	
************	ighing a	nd Shipping I	nforma	tic		Weighing Lab	PM2.5 Laboratory	
Filter ID		•···		_		Analyst Name	Maddox	
Weighing Lab						Weighing Date	10/11/2012	
Analyst/Custodian							Judy Maddox	
Shipment Date						Shipped by	•	
Sent to (PE Org)				٤	,	Shipment Date	10/11/2012	
<b>Date This Filter Mus</b>	t be Used	<b>by</b> :		R€		Airbill No.	OUT-101112	
Normally, the weighing labo	oratory com	oletes Part I, keeps I	copy and se	nds	Se	ent to (PE Org)	R-4, Greg Noah	_
PART II – FIELD OFF	ICE			<u> </u>	/ Thi	is Filter Must b	Used by: 11/10/2012	
Date Received: 10	<u>/11/13</u>		d by: 💪	. /\/oa/	1			
Package Condition: 1		<u> </u>						
f rejected, the filter cass		be returned to the	weighing l	aborator	y with th	e next outgoin <sub>t</sub>	g shipment.	
PART III – FIELD SIT	<u>'E</u>		15.5 <del>     </del>	50.2 1.2	a de la companya de	es de la companya de		1.42 1.74
			ling Eve	ent ini	<del> </del>			
Arrival Date		10/17/12	<u>-</u>		PE	P Field Scien	tist: G-, Noah	
Site Name & Des		YBH					<del></del>	
Primary SLT PM-2.5		Make/Model: —				rial No.:	- 10/	
Primary SLT PM-10	Sampler	Make/Model:			Se	rial No.:	1/18/12	
AQS	S Site ID	YBA			PC	oc: /		
Other Operators or Ob	oservers	M. CA	ou e					
	The second secon	Sam	pling Ev	∕ent Fi	ilter Da	ata		
Sampling Date: 10/	17/17		Retrieva	al Date:	10/1	8/12	Time: /222	
Event Filter Integrity:	<b>₽</b> OK	□ Reject (describ	e)		,			
Sample Type								
□ RO - Routine		B - Field Blank (I	RO Casse	ette ID:	512	<b>9</b>	ther (describe)	
☐ CO - Collocated PE	EP DI	Expired Filter (not	used)					
☐ TB - Trip Blank (la:	st RO Cas	sette ID used in a	audit trip: _		)			
□ Void (why?)								
PEP Cut Point: □ P	M-2.5 i	2 PM-10	PM-2.5	Separat	tor Type	e: 🗆 WINS	UVSCC M/A	
			<u> </u>	<del> , '</del>			7	
PART IV - FIELD FIL	- 1.0 /	PPING TO WEIG			10-00	20 011	· · · · · · · · · · · · · · · · · · ·	
	0/19/1	7	Affiliatio		15 EV	<del>// / _</del>	7 B	
	Shipped by G. Noah Shipping Destination: RY LAB							
Tracking No. /	<u> </u>			g Comp		NA		
			<i>е сору апа</i>	t sends th	ne top (o	riginal) copy to	the laboratory with the filter.	
PART V – WEIGHING  Date Received	LABOR	Received by	,.			<del> </del>	Integrity Flag:	
Shipment				م ا ء	· · · · · · · · · · · · · · · · · · ·		Integrity Flag:	
Integrity OK?  □	Yes □ No						☐ Frozen ☐ Cold ☐ Ambi	
The weighing laboratory	will DATE	-STAMP and attac	h the COC	form to i	the recei	ving log-book,	in which same info is recorded	l.

Filter Weighing and Shipping Information

Filter Cassette No. 10424

PEP Event Type: FRM PM-2.5 PM-Coarse

	••		_				
Sampling Event Information							
AQS Site ID	TSPS	Setup Date 1017/12		10/17/12			
Site Name	3	Primary SLT Sampler Serial No.					
PEP Field Scientist 6. N	DAID	PEP PQ200A Serial No.		S88			
Parameter Check Device	Make/ Mode		Se	rial No.			
Multi-Standard <sup>1</sup>	BOI DELTACAL		Ø197	7			
Temperature Standard							
Barometric Pressure Standard	6	0 1017/12					
Flow Rate Standard							
Time Checks OK?	'ষ্∕Yes □ No (describe)	2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Alace to the process the process the second of the process to the			
Monitoring Site Criteria OK?	')≱oYes □ No (describe)	and the second s		e de la compositione de la composition			
1 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1	. / 10700-01 11 11		77.7 7 7				

<sup>&</sup>lt;sup>1</sup> Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ:	200A PEP Sample	Date: 1017/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	(6) cmH₂O	<sup>9</sup> ଟ cmH₂O	⊠Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	756 mmHg	754 mmHg	Y©Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	24, Z, °C	77,5 ℃	`DWes □No
Filter Sensor	<u>±</u> 2°C	28.5 °C	°C (Ø,€	'⊠Yes □No
		Flow Rate Veri	fication	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	6.90 Lpm	G 5 Lpm	Twes □No
Design Flow Rate	Criteria (±4%)	Ref Ştandard	Design	Verification OK?
"Č" Check	15.83 ≤ Q ≤ 17.50	6.90 Lpm	16.67 Lpm	□Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP EX	osure Data					
Filter Cassette ID	5050	Cassette Retrieval Date/Time:					
PM Cut Point		7 10/18/12 12:14					
Elapsed Time (ET)	25,59	Filter Integrity OK? Services	□ No (describe)				
Total Volume (m <sup>3</sup> )	<b>て</b> 4.62	· · · · · · · · · · · · · · · · · · ·					
Flow Rate (Lpm)	Q: 16.7	Avg: (6.76	cv: \$\(\mathcal{Q}\), \(\sigma\)				
Start Date/Time	10/17/12 12:00	Data Download OK? Yes	□ No (describe)				
Stop Date/Time							
Temperature (°C)	Max: 28,0	Min: 17. ♥	Avg: Z1,0				
Bar. Pressure (mm Hg)	Max: 754	Min: 7 48	Avg: 751				
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :					
Trip Blank Cassette ID		Field Flags:					
Companion Cassette ID <sup>4</sup>							
Collocated Cassette ID(s) <sup>5</sup>	ION IZ						

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F Filter Cassette No. 5050 **BGI Sampler Cassette** Cassette Type PART I – WEIGHING LABORATORY Filter ID No. Т2636149 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID Analyst Name Maddox Weighing Lab Weighing Date : 10/11/2012 Analyst/Custodian ٦ Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Sł Airbill No. OUT-101112 Date This Filter Must be Used by: Ret Sent to (PE Org) Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: Package Condition: ➤Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information PEP Field Scientist: 6, NOAH Arrival Date at Site 10/17/12 Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 10/18/12 Serial No.: Primary SLT PM-10 Sampler Make/Model: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Retrieval Date: 15/19 Sampling Date: 10117 Time: 12:14 Event Filter Integrity: ➤ OK □ Reject (describe) Sample Type **⊠**RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) ☐ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: ☐ PM-2.5 □ PM-1'0 PM-2.5 Separator Type: WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date | \O\\A\\Z Affiliation: \)SF(4) Shipping Destination: PY (IR) Shipped by 6. NOAH Tracking No. | Shipping Company: NIA AIM On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag:

Integrity OK? The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

Max Temperature:

°C

Notes:

Shipment

☐ Yes ☐ No

Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient

PEP Event Type: D PRIVI PIVI-2.5 D PIVI-Coarse						
	Salvapling Event I	nformation				
AQS Site ID	Setup Date 161712					
Site Name VEA		Primary SLT Sampler Serial No.				
PEP Field Scientist 6	HAOL	PEP PQ200A Serial No. 594		594		
Parameter Check Device	Make/ Mode	Make/ Model		erial No.		
Multi-Standard <sup>1</sup>	BGI DELJACIOL		019	)		
Temperature Standard						
Barometric Pressure Standard		10/10/12				
Flow Rate Standard		*				
Time Checks OK?	স্থYes □ No (describe)					
Monitoring Site Criteria OK?	Y©Yes □ No (describe)			1.00mm (1.00mm) 1.00mm (1.00		

<sup>&</sup>lt;sup>1</sup> Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date: 10/17/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	99 cmH₂O	$97$ cm $H_2O$	™PYes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification QK?
Ambient	± 10 mmHg	756 mmHg	7SS mmHg	XYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	± 2°C	23,S °C	23,Ø °C	XYes □No
Filter Sensor	<u>±</u> 2°C	24,2 %	23,4°C	⊠Yes □No
		Flow Rate Ver	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	16:79 Lpm	16:70 Lpm	ÖXYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	(6,79 Lpm	16.67 Lpm	'Sey'es . □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exp	osure Data	**************************************
Filter Cassette ID	10924	Cassette Retrieval Date	e/Time: 🚱
PM Cut Point	□ PM-2.5 <b>X</b> PM-10GXL	10/18/12 4	2100 12:10
Elapsed Time (ET)	23:59	Filter Integrity OK?	🛚 Yes 🗆 No (describe)
Total Volume (m <sup>3</sup> )	24.04		-
Flow Rate (Lpm)	Q: 16.7	Avg: [6,7]	cv: 0.59
Start Date/Time	10/13/12 12:00	Data Download OK?	➤ Yes □ No (describe)
Stop Date/Time	10/18/12 12:00		-
Temperature (°C)	Max: こフ,つ	Min: 17.6	Avg: 21, Ø
Bar. Pressure (mm Hg)	Max: 755	Min: 749	Avg: 751
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID4	GW 10/18/12		-
Collocated Cassette ID(s)5			

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380-1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** 10924 Filter Cassette No. **BGI** Sampler Cassette Cassette Type PART I – WEIGHING LABORATORY T2636131 Filter ID No. Filter Weighing and Shipping Informatio PM2.5 Laboratory Weighing Lab Filter ID Maddox Analyst Name Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Judy Maddox Shipped by Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) S OUT-101112 Airbill No. Date This Filter Must be Used by: Re Normally, the weighing laboratory completes Part I, keeps 1 copy and sends. R-4, Greg Noah Sent to (PE Org) PART II – FIELD OFFICE This Filter Must be Used by: 11/10/2012 Received by: G. Noa 4 Date Received: /12 Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Make/Model: Primary SLT PM-10 Sampler Serial No.: AQS Site ID POC: Other Operators or Observers Crowe Sampling Event Filter Data Sampling Date: Retrieval Date: Time: 1210 Event Filter Integrity: ☑OK ☐ Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PM-10 PEP Cut Point: □ PM-2.5 PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date USEDI Affiliation: Shipped by Shipping Destination: Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °C Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient ☐ Yes ☐ No Max Temperature:

Integrity OK? | Yes | No | Max remperature. C | Cold Pack Condition. | Frozen | Cold | Ambie |
The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: ☐ FRM PM-2.5 ☐ PM-Coarse

Sampling Event Information						
AQS Site ID	ZSS	Setup Date 1017 12				
Site Name YEA		Primary SLT Sampler Serial No.				
PEP Field Scientist 6. N	DAH	PEP PQ200A Serial No.	595			
Parameter Check Device	Make/ Mode	el Se	erial No.			
Multi-Standard <sup>1</sup>	BGI DELTACAL	Ø 197				
Temperature Standard	The state of the s					
Barometric Pressure Standard	(ن	La Land				
Flow Rate Standard		WI //IZ				
Time Checks OK?	7×Yes □ No (describe)					
Monitoring Site Criteria OK?	r≪Yes □ No (describe)					
	. / DCIMIC 1 15	7. (7.7) 1 7.0 17.7 7 4				

Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date: 10/17/12		
Leak Check	Criteria	Beginning P Ending P		Verification OK?
2-Minute Interval	Change < 5 cmH₂O	CmH₂O	94 cmH <sub>2</sub> O	°P¥es □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	757 mmHg	754 mmHg	⊠Yes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	21,9 ℃	29.1 °c	Aves □No
Filter Sensor	<u>±</u> 2°C	Z4,7 °C	ZS,2 °C	XVes □No
		Flow Rate Veri	fication	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	6.93 Lpm	16.67 Lpm	ÆYes □No
Design Flow Rate	Çriteria (±4%)	Ref Standard	<b>D</b> esign	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	6.93 Lpm	16.67 Lpm	≫Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exp	oosure Data	
Filter Cassette ID	8913	Cassette Retrieval Date/Time:	The state of the s
PM Cut Point	M PM-2.5 □ PM-10	10/18/12 12:19	
Elapsed Time (ET)	24:00	Filter Integrity OK? Yes	s □ No (describe)
Total Volume (m³)	24.62	,	
Flow Rate (Lpm)	Q: 16.7	Avg: 16.76	cv: Ø, 41
Start Date/Time	1017 12 12:00	Data Download OK? Yes	s □ No (describe)
Stop Date/Time	10/18/12 12:00		
Temperature (°C)	Max: 27,9	Min: 16.8	Avg: 21, 6
Bar. Pressure (mm Hg)	Max: つらり	Min: 7 5	Avg: 75]
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID <sup>4</sup>	10/18/13		
Collocated Cassette ID(s) <sup>5</sup>	(O)(e)		

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

### PEP Chain-of-Custody F

FEF Chain-or-custody i	Filter Cassette No. 8913		
	Cassette Type BGI Sampler Cassette		
PART I – WEIGHING LABORATORY	Filter ID No. T2636125		
Filter Weighing and Shipping Information	Weighing Lab PM2.5 Laboratory		
Filter ID Fi	Analyst Name Maddox		
Weighing Lab	Weighing Date 10/11/2012		
Analyst/Custodian Ta	Shipped by Judy Maddox		
Shipment Date	=		
Sent to (PE Org) Shi			
Date This Filter Must be Used by: Retu			
Normally, the weighing laboratory completes Part I, keeps $1$ copy and sends $2$	Sent to (PE Org) R-4. Greg Noah		
PART II – FIELD OFFICE  Date Received: /6/II/I2 Received by: C., M	This Filter Must be Used by: 11/10/2012		
	091/		
Package Condition: Good GReject (Why?)  frejected, the filter cassette should be returned to the weighing labora	tory with the next outgoing shipment		
PART III – FIELD SITE			
Sampling Event	Information		
Arrival Date at Site 10/17/12	PEP Field Scientist: ( Noah		
Site Name & Description			
Primary SLT PM-2.5 Sampler Make/Model:	Serial No.: 20 10/18/12		
Primary SLT PM-10 Sampler Make/Model:	Serial No.:		
AQS Site ID YBA 255	POC:		
Other Operators or Observers	•		
Sampling Event	Filter Data		
Sampling Date: 10/17/12 Retrieval Date	te: 10/18/12 Time: 12-19		
Event Filter Integrity: ☑ OK ☐ Reject (describe)			
Sample Type			
RO - Routine	D:) □ Other (describe)		
□ CO - Collocated PEP □ Expired Filter (not used)			
□ TB - Trip Blank (last RO Cassette ID used in audit trip:	)		
□ Void (why?)	· · · · · · · · · · · · · · · · · · ·		
PEP Cut Point: ☑ PM-2.5 ☐ PM-10 PM-2.5 Sepa	arator Type: ☑ WINS □ VSCC		
PART IV – FIELD FILTER SHIPPING TO WEIGHING LAB			
	USEPA RY		
Shipped by G. Nooh Shipping Destination: RYLAB			
Tracking No. N A Shipping Company: NA			
On completion of Part II-IV, the field scientist keeps one copy and send	ls the top (original) copy to the laboratory with the filter.		
PART V – WEIGHING LABORATORY	<del></del>		
Date Received Received by:	Integrity Flag:		
Shipment	E 1102011 E COIG E 7 III BIOTIL		

Filter Weighing and Shipping Information

PEP Event Type: ★FRM PM-2.5 □ PM-Coarse

Sampling Event Information							
AQS Site ID	YBB 25:	5 POC: [	Setup Date	10/17/12			
Site Name	YEB		PEP Field Scientist	6. NOAH)			
GPS Latitude			Primary SLT Sampler Serial No.	MA			
GPS Longitude			PEP PQ200A Serial No.	587			
Parameter Çl	neck Device	Make/ Model	Şerial No.	Last Calibration Date			
Multi-Sta	andard <sup>1</sup>	BGI DECTACAL	0197	3/2/2012			
Temperature	e Standard	The second secon		,			
Barometric Pres	sure Standard	The same	10(1)1/2				
Flow Rate	Standard		The straight of the straight o	Acres to a second desired the second			
Tim	e Checks OK?	∀Yes □ No (describe)		·			
Monitoring Sit	te Criteria OK?	'≿0Yes □ No (describe)	-	<del>.</del>			
Use this line for m	ulti-standard insti	uments (e.g. RGI TriCal and I	DeltaCal) when used for all three chec	·ks			

PQ	200A PEP Sample	r Verification Che	ecks <sup>2</sup>	Date:( 017/12	
Leak Check	Criteria	Beginning P	Ending P	Verification ØK?	
2-Minute Interval	Change < 5 cmH₂O	98 cmH₂O	95 cmH₂O	`⊠Yes □ No	
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?	
Ambient	<u>±</u> 10 mmHg	757 mmHg	758 mmHg	Yes □ No	
Temperature	Criteria	Ref Standard	Sampler	Verification OK?	
Ambient Sensor	<u>±</u> 2°C	14,4 °C	14.00 °C	'⊊cYes □ No	
Filter Sensor	<u>±</u> 2°C	14,5 ℃	12.8 ℃	∑ves □ No	
	Flow Rate Verification				
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?	
FR (Cal.) Check	< 4% difference	6.65 Lpm	6.70 Lpm	Σpγes □ No	
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?	
"Q" Check	16.00 ≤ Q ≤ 17.34	16.65 Lpm	16.67 Lpm	Yas □ No	

Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting

a sampling event. Fill out a new	w Field Data Sheet for the replace	ment sampler.	
	PEP EX	ogsure Data	d Section 1997
Filter Cassette ID	530	Cassette Retrieval Date/Time:	
PM Cut Point	<b>№</b> PM-2.5 □ PM-10	10/18/12 10/14	
Elapsed Time (ET)	24.00	Filter Integrity OK?	□ No (describe)
Total Volume (m <sup>3</sup> )	24.03		,
Flow Rate (Lpm)	Q: 16.7	Avg: 16.70	CV: 0,46
Start Date/Time	10/17/12 10:00	Data Download OK? KYes	□ No (describe)
Stop Date/Time			,
Temperature (°C)	Max: ZG, Y	Min: \ <, \	Avg: 'Z], Ø
Bar. Pressure (mm Hg)	Max: 758	Min: 752	Avg: 754
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID4	(2)		
Collocated Cassette ID(s)5	10/8/12		

Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380-1500 minute range.

For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

### PEP Chain-of-Custody F

PEP Cham-or-cus	Slouy F	rifter Cassette No.	5501	
	_	Cassette Type	BGI Sampler Cassette	
PART I – WEIGHING LABORATORY		Filter ID No.	T2636138	
Filter Weighing and Shipping In	formation	Weighing Lab	PM2.5 Laboratory	
Filter ID	Fi	Analyst Name	Maddox	
Weighing Lab		Weighing Date	10/11/2012	
Analyst/Custodian	Τŧ	Shipped by	Judy Maddox	
Shipment Date				
Sent to (PE Org)	Shi	Shipment Date	10/11/2012	
Date This Filter Must be Used by:	Retu	Airbill No.	OUT-101112	
Normally, the weighing laboratory completes $P$ art $I$ , keeps $I$ co	py and sends 2	Sent to (PE Org)	R-4, Greg Noah	
PART II – FIELD OFFICE		This Filter Must be	Used by: 11/10/2012	
Date Received: 10/11/12 Received	by: G. Nonh			
Package Condition: ☐ Good ☐ Reject (Why?)				
If rejected, the filter cassette should be returned to the we	eighing laboratory	with the next outgoing s	hipment.	
PART III – FIELD SITE	ng Event Info	rmation		
Arrival Date at Site 10/17/12	ing Event inic	PEP Field Scientis	t C N	
Site Name & Description \( \frac{1}{18} \) \( \frac{1}{18} \)	<u>-</u>	FEF Held Scientis	" Cr. /Yaah	
1.00		Coriol No. 46.		
Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 10/18/				
Primary SLT PM-10 Sampler Make/Model: Serial No. 2000 A				
AQS Site ID YBB 255		POC:	<u>u</u>	
Other Operators or Observers M. Crowe				
- · · · · · · · · · · · · · · · · · · ·	ling Event Filt	ter Data		
	Retrieval Date:	10/18/12	Time: 10/4	
Event Filter Integrity: ☐ OK ☐ Reject (describe)	<u> </u>			
Sample Type				
to RO - Routine ☐ FB - Field Blank (R0		) 🗆 Oth	er (describe)	
☐ CO - Collocated PEP ☐ Expired Filter (not u	sed)			
☐ TB - Trip Blank (last RO Cassette ID used in au	dit trip:	)		
□ Void (why?)				
PEP Cut Point: ☐ PM-2.5 ☐ PM-10	PM-2.5 Separato	r Type: 🖫 WINS	USCC	
PART IV – FIELD FILTER SHIPPING TO WEIGH	TNC I AD			
	Affiliation: US	EDA RY		
	Shipping Destination: RU LAK			
	Shipping Company: NA			
On completion of Part II-IV, the field scientist keeps one	· · · · ·	1 77 2	he laboratory with the filter.	
PART V – WEIGHING LABORATORY				
Date Received Received by:		ln	tegrity Flag:	
Shipment Integrity OK? ☐ Yes ☐ No Max Tempera			Frozen □ Cold □ Ambient	
The weighing laboratory will DATE-STAMP and attach i	the COC form to th	e receiving log-book, in	which same info is recorded.	

Filter Weighing and Shipping Information

# PEP Field Data Sheet for BGI PQ200A PEP Event Type: | FRM PM-2.5 | PM-Coarse

Sampling Event Information								
AQS Site ID	ABR 1	35	PO	C:	Setup Date 10 11			
Site Name	MBB				PEP Field Scientist C NONG			G NOMA
GPS Latitude				]	Primary S	LT Sampler S	erial No.	
GPS Longitude				_	PE	EP PQ200A S	erial No.	597
Parameter Ch			Vlake/ Mode			Serial No.		Last Calibration Date
Multi-Sta		GGI	DECTACAS	ر ]	Ø 5	97	-	32/2012
Temperature	Standard			No. of the last of	The state of the s	(A)	60117	
Barometric Pressure Standard					- V	)() <		
Flow Rate S	Standard							and a second accordance accordance and a second accordance accordance and a second accordance a
Time	Checks OK?	Ð∦es	□ No (des	cribe)				
Monitoring Site	Criteria OK?	<b>⊠</b> Yes	□ No (des	cribe)				
<sup>1</sup> Use this line for mu	ılti-standard instr	uments (e	e.g., BGI TriC	Cal and D	eltaCal) wh	en used for all	three chec	eks.
P(	2200A PEP 9	Sample	r Verifica	tion Cl	necks <sup>2</sup>		Date: \	0/17/12
Leak Check	Criteri	a	Beginn	ning P	En	nding P	\	Verification OK?
2-Minute Interval	Change < 5		96	cmH <sub>2</sub> C	1 - 1 -		∑ Yes	
Bar. Pressure	Criteri		Ref Sta	آنو ، يُرَاثِ		ampler	1	Verification OK?
Ambient	<u>±</u> 10 mm	Hg	757	mmHo	3 757	1 mmHg	ΉγΣύΥes	
Temperature	Criteri	a	Ref Sta			ampler		Verification OK?
Ambient Sensor	<u>±</u> 2°C		14,9	°C			ồ≯rYes	□ No
Filter Sensor	<u>±</u> 2°C		14.6	, °(	) 13	3, ζ ° . Σ	Ɗd'Yes	□ No
Flow Rate Verification								
Audit Standard	Criteri		Ref Sta			ampler		Verification OK?
FR (Cal.) Check	< 4% differ		16 86				12×1Yes	
Design Flow Rate		Çriterià ( <u>±</u> 4%) Ref Standài			Design		1.	Verification QK?
"Q" Check 16.00 ≤ Q ≤ 17.34 (6,8℃			-		16.67 Lpm	≱Yes	<del>_</del>	
<sup>2</sup> Indicate only the five below and/or in the January a sampling event. Fix	ield notebook.  If	troublesi	hooting is uns	successful	, the sample	e. Document tro r must be reca	oubleshooi librated oi	ting in the "Notes" section repaired before conducting
					ure Data			
	ssette ID Z	368			Cassette Retrieval Date/Time:			
	Cut Point 🗆 PN	Л-2.5	□ PM-10 ¬		0/18/12		5	
Elapsed Time (ET) ころら			Filt	Filter Integrity OK? □ ∀zryes □ No (describe)				
	ume (m³)	1,02	<u> </u>					
				Avg: 6.70 CV: 0.40				
Start Date/Time 10/17/12 10:90 Stop Date/Time 10/18/12 10:00				Data Download OK? → Yes □ No (describe)				
Temperature (°C) Max: 76, 6 Min:			. III eri	1	Δ	·		
Bar. Pressure (mm Hg) Max: 754					<u> </u>	Avg	<del></del>	
Field Blank Cassette ID			Min	npler Flags	3	Avg	120	
Trip Blank Cassette ID				npier Flags ld Flags:		-	, <u>.</u>	
Companion Cassette ID <sup>4</sup>			116	u i iays.			<u> </u>	
Collocated Casse				10/19/15				
Make sure to add (1	EST) flag in "San	ıpler Fla)	gs" if runtime	e is outsid	e of 1380- 1	500 minute rai	ıge.	
Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.  For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.								

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** Filter Cassette No. 2368 **BGI Sampler Cassette** Cassette Type PART I - WEIGHING LABORATORY Filter ID No. T2636133 Filter Weighing and Shipping Information PM2.5 Laboratory Weighing Lab Filter ID Analyst Name Maddox Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Shipped by Judy Maddox Shipment Date 10/11/2012 Shipment Date Sent to (PE Org) OUT-101112 Airbill No. R Date This Filter Must be Used by: Normally, the weighing laboratory completes Part I, keeps 1 copy and send: R-4, Greg Noah Sent to (PE Org) ' PART II – FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: / Time: 1010 Event Filter Integrity: ₽OK ☐ Reject (describe) Sample Type **1**2∕ŔO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) ☐ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PM-2.5 Separator Type: □ WINS PEP Cut Point: ☐ PM-2.5 ☐ PM-10 □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB

Shipment Date	10/19/12	Affiliation: USEPA RY
Shipped by	G- Noch	Shipping Destination: RYLAB
Tracking No.	NA	Shipping Company: N/A

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

	PART V -	WEIGHING L	ABORATORY
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Date Received		Received by:		Integrity Flag:
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	C Cold Pack Condition:	☐ Frozen ☐ Cold ☐ Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: □ FRM PM-2.5 □ PM-Coarse PM ic										
			Şampling	g Ēvent	Info	matio	n			
AQS Site ID	168 10	25_	PC	DC: j			Se	tup Date	19/17/12	
Site Name	YSS					F	EP Field	Scientist	G. NOBAL	
GPS Latitude				_	Prima	ry SLT S	Sampler S	erial No.	てる	
GPS Longitude	•			_		PEP F	Q200A S	erial No.	59O	
Parameter Ch	ęck Device		Make/ Mode	ęl		Şei	ial No.		Last Calibratio	n Date
Multi-Standard EGI OSCIDENC				(	319	$\supset$		3/2/201	<u>て</u>	
Temperature Standard			-2-2-			1	1.			
Barometric Press	sure Standard			The state of the s			10/13	गर	-	
Flow Rate S	Standard						***************************************			
Time	Checks OK?	by⊲Yes	□ No (des	scribe)					-	
Monitoring Site	Criteria OK?	⊠sYes	□ No (des	scribe)						
$^{I}$ Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.										
PC	2200A PEP \$	Sample	er Verifica	ation Cl	necks	2		Date: [	diolie	
Leak Check	Criteri	a	Begini	ning P		Endin	g P	1	Verification OK?	,
2-Minute Interval	Change < 5	cmH <sub>2</sub> O	108	cmH <sub>2</sub> C	) ]	<u>67</u>	cmH <sub>2</sub> O	Ľ⇒Yes	□ No	
Bar. Pressure	Criteri	a 75			1754	Şamp	ler	\	Verification ÖK?	k i i i
Ambient	<u>±</u> 10 mm	Нg	76.84	<u> Ծ</u> թա	<b>₹</b> , [ €		mmHg	□ Yes	□ No	
Temperature	Criteri	а	Ref Sta	andard C	י וכוב	<sup>Z</sup> Samp	ler	,	Verification OK?	, , , ,
Ambient Sensor	<u>±</u> 2°C		15.1	°C		<del>М, 7</del>	°C	Yes Yes	□ No	
Filter Sensor	<u>±</u> 2°C		15,0	D °C		13.9	°C	Έλλ Yes	□ No	
				Rate Ve	rifica	ation				
Audit Standard	Criteri		Ref Sta	andard		Samp	ler	1	Verification OK?	15 Sec. 1
FR (Cal.) Check	< 4% diffe		16.80		n k	;.7Ø	Lpm	√ Yes		
Design Flow Rate			Ref Sta	er eristes		Desig			Verification OK?	)
"Q" Check	16.00 ≤ Q ≤		16.70	•			6.67 Lpm	D⊼ Yes		
<sup>2</sup> Indicate only the fir below and/or in the f a sampling event. Fil	ield notebook.  If	troubles	hooting is un eet for the re	successful placement	, the sa t sample	mpler mi er.	ocument tr ust be reca	oubleshoo librated or	ting in the "Notes' r repaired before c	section onducting
Filtor Co	ssette ID	7/-		Exposi	· · · · · · · · · · · · · · · · · · ·	3 2 1 5 KM 1	l Date/Tin	201	<u> </u>	- 1,1
	Cut Point   P	767	<u>~</u> № PM-10		> (18)					
Elapsed T		<u>₹                                    </u>	<u>P</u> - M-10		Filter Integrity QK? □ XYes □ No (describe)				<del>.</del>	
	ume (m³) 7	<del>7</del> , & a	7			enn y	···   4	u <b>c</b> o □ 1	w (describe)	
			 Avc	Avg: 16,700 CV: 0,41						
Start Date/Time \0\17 12 0:00				Data Download OK? SeYes □ No (describe)						
Stop Date/Time 10 18 12 10:00										
Temperature (°C) Max: "Z6-1			Min	: <u>15</u>	, Ø		Avg	:207		
Bar. Pressure (mm Hg) Max: 754			Min		47		Avg	: 750		
Field Blank Cassette ID			Sar	npler f	Flags <sup>3</sup> :					
Trip Blank Cassette ID			Fiel	Field Flags:						
Companion Cas		<u> </u>	J colors							
Collocated Casse			1010111		· · ·		-	_		
Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range. For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa. For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.										

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F Filter Cassette No. 4262 Cassette Type **BGI Sampler Cassette** PART I - WEIGHING LABORATORY T2636140 Filter ID No. Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID F Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Τí Shipped by Judy Maddox **Shipment Date** Shipment Date 10/11/2012 Sent to (PE Org) Shi Airbill No. OUT-101112 Date This Filter Must be Used by: Retu Sent to (PE Org) R-4, Greg Noah Normally, the weighing laboratory completes Part I, keeps I copy and sends 2 PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: Package Condition: ☐ Good ☐ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: Time: 10:19 Event Filter Integrity: ☐ OK ☐ Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: □ Other (describe) ☐ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) □ PM-10 PEP Cut Point: □ PM-2.5 PM-2.5 Separator Type: □ WINS □ VSCC

PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB

Shipped by G. Noch Shipping Destination: RU LAK  Tracking No. NA Shipping Company: NA	Shipment Date	10/19/12	Affiliation: USENA KY
Tracking No. N/A Shipping Company: W/A	Shipped by (	G. Noah	Shipping Destination: RU LAR
	Tracking No.	N/A	Shipping Company: W/A

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART V - WEIGHING LABORATORY

2 TA 1 11 Z3 Z C-2.	E TO BIID GIGIT O				
Date Received		Received by:			Integrity Flag:
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	O	Cold Pack Condition:	☐ Frozen ☐ Cold ☐ Ambient
701 t t t t	Mr. To Contr. Con.	11.00004			

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: AFRM PM-2.5 ☐ PM-Coarse Sampling Event Information AQS Site ID Setup Date 10 Site Name Primary SLT Sampler Serial No. PEP Field Scientist PEP PQ200A Serial No. **Parameter Check Device** Make/ Model Serial No. JACPR Multi-Standard<sup>1</sup> 0019 Temperature Standard 2/3/101 Barometric Pressure Standard Flow Rate Standard Time Checks OK? Yes □ No (describe) Monitoring Site Criteria OK? ØoYes □ No (describe)

 $<sup>^{1}</sup>$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ:	200A PEP Sample	Date: 10/15/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	CmH <sub>2</sub> O	<sup>റ്റ</sup> cmH₂O	12≪Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	755 mmHg	75 <i>3</i> mmHg	YAYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	± 2°C	25.6 ℃	24,4 °C	D%(es □No
Filter Sensor	<u>±</u> 2°C	26.Z °C	Z5,9 °C	∑©Yes □No
Flow Rate Verification				
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	17, 14 Lpm	6.70 Lpm	ØYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	∫"7、 [┗ Lpm	16.67 Lpm	Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exp	oosure Data
Filter Cassette ID	8377.	Cassette Retrieval Date/Time:
PM Cut Point	<b>□</b> PM-10	10/19/12 13:32
Elapsed Time (ET)	24:00	Filter Integrity ØK?
Total Volume (m³)	M. 04	
Flow Rate (Lpm)		Avg: [6.7] CV: Ø,5]
Start Date/Time	10/18/12 13:30	Data Download OK? ☐ Yes ☐ No (describe)
Stop Date/Time	10/19/12 13:30	
Temperature (°C)	Max: 28,1	Min: 6, Z. Avg: 15,3
Bar. Pressure (mm Hg)	Max: 756	Min: 751 Avg: 753
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :
Trip Blank Cassette ID		Field Flags:
Companion Cassette ID <sup>4</sup>	3	
Collocated Cassette ID(s) <sup>5</sup>	10/17/12	

Notes: & From COUNIDED, NOT DURING SAMPLING PERUDO

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

 $<sup>^4</sup>$  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** 8377 Filter Cassette No. Cassette Type **BGI Sampler Cassette** PART I – WEIGHING LABORATORY Filter ID No. T2636137 Filter Weighing and Shipping Information PM2.5 Laboratory Weighing Lab Filter ID Maddox Analyst Name Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Judy Maddox Shipped by Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) OUT-101112 Airbill No. Date This Filter Must be Used by: Rŧ Normally, the weighing laboratory completes Part I, keeps I copy and sends Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: \O\) Received by: NOAH Package Condition: ➤Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information PEP Field Scientist: C. NOAA Arrival Date at Site Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 10/18/12 Primary SLT PM-10 Sampler Make/Model: Serial No.: 7506 POC: AQS Site ID Other Operators or Observers Sampling Event Filter Data Sampling Date: ↓ ♥ | ( 🛠 | Retrieval Date: 1つ19 Time: Event Filter Integrity: No OK □ Reject (describe) Sample Type ÆKO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: \(\sigma\)PM-2.5 □ PM-10 PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date \ \O\ / 9\ (\Z Affiliation: (W LBB Shipped by Con NOATA Shipping Destination: (仏仏 Shipping Company: \mathcal{h}/\mathcal{h}\mathcal{h} Tracking No. | W/ 🛌 On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY **Date Received** Received by: Integrity Flag:

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

Max Temperature:

°C

Notes:

Shipment

Integrity OK?

☐ Yes ☐ No

Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient

PEP Field Data Sheet for BGI PQ200A **PEP Event Type:** □ FRM PM-2.5 ☐ PM-Coarse Sampling Event Information AQS Site ID Setup Date Site Name Primary SLT Sampler Serial No. PEP Field Scientist PEP PQ200A Serial No. **Parameter Check Device** Make/ Model Serial No. Multi-Standard<sup>1</sup> TACK Temperature Standard 1018112 Barometric Pressure Standard Flow Rate Standard Time Checks OK? Yes □ No (describe) Monitoring Site Criteria OK? Y Yes □ No (describe)

 $<sup>^{1}</sup>$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	Date: 10(18)12					
Leak Check	Criteria	Beginning P Ending P		Verification OK?		
2-Minute Interval	Change < 5 cmH₂O	105 cmH <sub>2</sub> 0	103 cmH₂O	⊠Yes □No		
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?		
Ambient	<u>±</u> 10 mmHg	752 mmHg	75S mmHg	"DAYes □No		
Temperature	Criteria	Ref Standard	Sampler	Verification OK?		
Ambient Sensor	<u>±</u> 2°C	26.1 °C	24,6 ℃	XaYes □No		
Filter Sensor	± 2°C	30,5°	\$2,S °C	Sporyes □No		
		Flow Rate Ver	ification			
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?		
FR (Cal.) Check	< 4% difference	16,93 Lpm	16,72 Lpm	'XYes □No		
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?		
"Q" Check	15.83 ≤ Q ≤ 17.50	16.93 Lpm	16.67 Lpm	X5Yes □No		

Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful; the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

		osure Data
Filter Cassette ID	10219 @10/18/12	Cassette Retrieval Date/Time:
PM Cut Point	□ PM-2.5 PM-10 □	10/19/12 13:37
Elapsed Time (ET)	23:59	Filter Integrity QK?
Total Volume (m³)	21,02	-
Flow Rate (Lpm)	Q: 16.7	Avg: 16,70 CV: 6,49
Start Date/Time	10/18/12 13:30	Data Download OK? Doyes □ No (describe)
Stop Date/Time		
Temperature (°C)	Max: 28,5	Min: 6.1 Avg: (5.3
Bar. Pressure (mm Hg)	Max: 755	Min: 750 Avg: 753
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :
Trip Blank Cassette ID		Field Flags:
Companion Cassette ID4	Con	
Collocated Cassette ID(s)5	10/19/12	

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody I Filter Cassette No. Cassette Type C eP Sampler Cassette PART I - WEIGHING LABORATORY Filter ID No. T2636129 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Si Airbill No. OUT-101112 Date This Filter Must be Used by: Ref Normally, the weighing laboratory completes Part I, keeps 1 copy and sends Sent to (PE Org) R-4, Greg Noah PART II – FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: 10 ((1)2 G. NOAT Received by: Package Condition: ➤ Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: 6, NOAH) Site Name & Description Primary SLT PM-2.5 Sampler Make/Model Serial No.: 10/18/17 Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: 161912 Time: \< Event Filter Integrity: ☑OK ☐ Reject (describe) Sample Type XRO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: □ PM-2.5 □ PM-10<sup>\*</sup> PM-2.5 Separator Type: □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB 10/19/12 (KM Shipment Date Affiliation: Shipped by G. NOOA Shipping Destination: W Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °C Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient Max Temperature: ☐ Yes ☐ No Integrity OK? The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

	PEP Event Type: D FRM PN	И-2.5 □ PM-Cc	parse	M 10	
Er low	引く Sampling Event I	nformation	<b>*</b>		
AQS Site ID	3 YBA 106		10/18/12		
Site Name	<i>\\</i>	Primary SLT San	pler Serial No.		
PEP Field Scientist 6.1	IOAU	PEP PQ2	200A Serial No.	592	
Parameter Check Device	Make/ Model		Şerial No.		
Multi-Standard <sup>1</sup>	BGI DELTACK		0197		
Temperature Standard				•	
Barometric Pressure Standard	Co. I				
Flow Rate Standard	101181	/2			
Time Checks OK?	YKYes □ No (describe)		22		
Monitoring Site Criteria OK?	>¥es □ No (describe)				
Use this line for multi-standard instr	ruments (e.g., BGI TriCal and Deli	taCal) when used for	all three checks.	······································	

PQ200A PEP Sampler Verification Checks 2 Date: 101812							
Leak Check	Criteria	Beginning P Ending P		Verification OK?			
2-Minute Interval	Change < 5 cmH₂O	© cmH₂O	99 cmH <sub>2</sub> O	⊠Yes □No			
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?			
Ambient	± 10 mmHg	7SS mmHg	기년의 mmHg	Ye's □No			
Temperature	Criteria	Ref Standard	Sampler	Verification OK?			
Ambient Sensor	± 2°C	25.5 ℃	24.8 °C	TYes DNo			
Filter Sensor	<u>±</u> 2°C	260 4°C	76.3 °C	□Yes □No			
Flow Rate Verification							
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?			
FR (Cal.) Check	< 4% difference	16,97 Lpm	16,70 Lpm	⊠Yes □No			
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?			
"Q" Check	15.83 ≤ Q ≤ 17.50	16.97 Lpm	16.67 Lpm	DYes □No			

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP E	posure Data
Filter Cassette ID	1809	Cassette Retrieval Date/Time:
PM Cut Point	□ PM-2.5 □ PM-10	10119112 13145
Elapsed Time (ET)	10/18/12 13:30	Filter Integrity OK? □ No (describe)
Total Volume (m <sup>3</sup> )	10/19/12 13:30	
Flow Rate (Lpm)	Q: 16.7	Avg: 16,171 CV: 60,39
Start Date/Time	23:59	Data Download OK? Stres I No (describe)
Stop Date/Time		
Temperature (°C)	Max: 28,3	Min: 6, 7 Avg: 15.7
Bar. Pressure (mm Hg)	Max: 751	Min: 746 Avg: 749
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :
Trip Blank Cassette ID		Field Flags:
Companion Cassette ID <sup>4</sup>	Gri	
Collocated Cassette ID(s) <sup>5</sup>	51/19/101	

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380-1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the 1Ds can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F 1809 Filter Cassette No. Cassette Type **BGI Sampler Cassette** PART I - WEIGHING LABORATORY Filter ID No. T2636132 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID Fil Analyst Name Maddox Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian Ta Shipped by Judy Maddox **Shipment Date** Sent to (PE Org) Shipment Date 10/11/2012 Shir Date This Filter Must be Used by: Retur OUT-101112 Airbill No. Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 c Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 C. NOAH Received by: Date Received: 10 11 2017

If rejected, the filter cassette should	d be returned to the w	veighing laboratory wi	th the next outgoing ship	oment.
PART III – FIELD SITE				
	Sampl	ing Event Infor	mation	
Arrival Date at Site	101812		PEP Field Scientist:	G. NOAH
Site Name & Description	YBA		•	
Primary SLT PM-2.5 Sampler	Make/Model:	Carl	Serial No.:	-
Primary SLT PM-10 Sampler	Make/Model:	10/18/12	Serial No.:	
AQS Site ID	YBA 10	6	POC: J	
Other Operators or Observers				-
	Samp	oling Event Filte	r Data	
Sampling Date: \ (\$\square) \ \ \ \ \ )'	2	Retrieval Date: ) さ	19/12	Time: 13." HS
Event Filter Integrity: 🗷 OK	□ Reject (describe	<del></del>		
Sample Type				
RO - Routine	FB - Field Blank (R	RO Cassette ID:	) 🗆 Other	(describe)
☐ CO - Collocated PEP ☐	Expired Filter (not	used)		
☐ TB - Trip Blank (last RO Ca	ssette lD used in a	udit trip:	)	
□ Void (why?)				
PEP Cut Point: ☐ PM-2.5	<b>™</b> PM-10	PM-2.5 Separator	Type: □ WINS □	VSCC

PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB

Package Condition: ➤Good □ Reject (Why?)

Shipment Date 10/19/12	Affiliation: RY EPP	
Shipped by Co., No.345	Shipping Destination: (CH USS	
Tracking No. ⋈(♣	Shipping Company: W/A	_

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART V - WEIGHING LABORATORY

1	Date Received		Received by:				Integrity F	lag:	
I	Shipment Integrity OK?	□ Yes □ No	Max Temperature:	°С	Cold Pack	Condition:	□ Frozen	□ Cold □	□ Ambient
- 7	777 1 1 1 1	11 15 4000 0004	MD 1 1 .1 COCK		7	7 1 7		1 0 .	

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: ☐FRM PM-2.5 ☐ PM-Coarse

Sampling Even	t Information				
A 256	Setup Date 10/18/17				
7	Primary SLT Sam	pler Serial No.	N/A		
Crowe	PEP PQ2	200A Serial No.	585		
Make/ Mo	odel , ,	Se	rial No.		
BGT	Delfa Cal	0010	77		
		* <del>-</del>			
	Jun 1				
□Yes □ No (describe)					
r Yes □ No (describe)	** , 10,		en op a stronger in the second of the second		
	A 256 Crowe Make/Mo B (+ ±	Make/ Model  Barrier Delfa Cal  Yes - No (describe)	Setup Date  Primary SLT Sampler Serial No.  PEP PQ200A Serial No.  Make/ Model  Ser  B C D C C C C C C C C C C C C C C C C C		

 $<sup>^1</sup>$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date: 10/18/12		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	/C0 cmH₂O	/ <i>©</i> cmH₂O	□Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	755 mmHg	752 mmHg	TYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	± 2°C	76.9 °C	25,6 °C	☐Yes ☐No
Filter Sensor	<u>±</u> 2°C	28,7°C	29.0 °C	©¥es □No
		Flow Rate Ver	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	/7.19 Lpm	16.70 Lpm	©Yes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	17,19 Lpm	16.67 <b>L</b> pm	⊠Yes □No

Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

PEP Exposure Data						
4886	Cassette Retrieval Date/Time:					
☐ PM-2.5 ☐ PM-10	10/19/12 13:41					
23:59	Filter Integrity OK? □ No (describe)					
24.01						
Q: 16.7	Avg: 6.70 CV: 0,33					
10/18/12 13/30	Data Download OK?					
Max: 28,6	Min: 6, \ Avg: \S.3					
Max: 755	Min: 750 Avg: 753					
8571	Sampler Flags <sup>3</sup> :					
	Field Flags:					
10110115						
	4886 BPM-2.5 DPM-10 23:59 Z4.01 Q: 16.7 \0\18\12 \13\30 \10\19\12 \13;80 Max: 78.6 Max: 78.5	USB6       Cassette Retrieval Date/Time:         BPM-2.5       □ PM-10         IO (9)(2				

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

### Filter Weighing and Shipping Information **PEP Chain-of-Custody** Filter Cassette No. 4886 Cassette Type **BGI Sampler Cassette** Filter ID No. PART I - WEIGHING LABORATORY T2636145 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Airbill No. OUT-101112 Date This Filter Must be Used by: R١ Sent to (PE Org) R-4, Greg Noah Normally, the weighing laboratory completes Part I, keeps 1 copy and send: This Filter Must be Used by: 11/10/2012 PART II – FIELD OFFICE E. NOAH Date Received: Received by: Package Condition: ★ Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information PEP Field Scientist: 6, NOA-Arrival Date at Site Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No .: 10/18/12 Primary SLT PM-10 Sampler Make/Model: Serial No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Retrieval Date: \ (7) Sampling Date: Time: Event Filter Integrity: MOK Reject (describe) Sample Type XRO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: MPM-2.5 ☐ PM-10 PM-2.5 Separator Type: > WINS □ VSCC

PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB

Shipment Date \\@/19/(2	Affiliation: (24 + 12)
Shipped by 6, NOAH	Shipping Destination: (CA)
Tracking No. NA	Shipping Company: NA

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART	V –	WEIGHING	LABORAT	'OR 3

Date Received		Received by:			Integrity Flag:
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	°C	Cold Pack Condition:	☐ Frozen ☐ Cold ☐ Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

# **PEP Chain-of-Custody**

				,	1			
			•	•		Cassette T	ype	BGI Sampler Cassette
<u>PART I – WEIGHING I</u>	LABORATO	ORY				Filter ID	No.	T2636150
Filter Wei	ghing an	d Shipping	Informat	tio	ľ	Weighing I	Lab	PM2.5 Laboratory
Filter ID						Analyst Na	ıme ·	Maddox
Weighing Lab						Weighing D	ate	10/11/2012
Analyst/Custodian		-				Shipped	•	Judy Maddox
Shipment Date				<u> </u>				
Sent to (PE Org)				S.		Shipment D		10/11/2012
Date This Filter Must	be Used b	<b>У</b> :		Re		Airbill	-	OUT-101112
Normally, the weighing labor	atory comple	tes Part I, keeps 1	copy and se	nds		Sent to (PE C	)rg)	R-4, Greg Noah
PART II – FIELD OFFI	CE			1	L	This Filter Mu	ist be	Used by: 11/10/2012
Date Received: JO	1112	Receive	d by: 🤇	3. NO	HAC			
Package Condition:					· · · · ·			
If rejected, the filter casse		e returned to the	weighing l	aborate	ory wit	h the next outgoin	ig ship	oment.
PART III – FIELD SITI	k 	Samn	ling Eve	ant I	nforr	nation	5.50	
Arrival Date	at Site   La	<del>- t ,</del>	illig Eve	2116 1	mori	PEP Field Scie	ntiot:	M
Site Name & Des	- 10	2/18/12 VDA				FEF FIEld Scien		M, CROWE
Primary SLT PM-2.5 S		ake/Model:				Serial No.:		<u> </u>
Primary SLT PM-2.5 S		ake/Model: ake/Model:		() 1016	12			
		-	7	191191	72	Serial No.:		
	<del></del>	BA 250	0			POC: /		
Other Operators or Ob	servers			- 4 1	-:12			
	100	Sam	pling Ev	11 7 7		<del>                                     </del>	· · · · · · · · · · · · · · · · · · ·	- (2)
Sampling Date: (C)	18/12	<u>-</u>	Retrieva	ıl Date	<u>∍: )⊘</u>	119112		Time: (3.14)
Event Filter Integrity: `	⊠OK □	Reject (describ	e)					
Sample Type								
☐ RO - Routine	=	- Field Blank (		tte ID	: <u>48</u>	<u> </u>	Other	(describe)
☐ CO - Collocated PE		pired Filter (not	•					
☐ TB - Trip Blank (las	t RO Casse	ette ID used in a	audit trip: _			)		<u></u>
□ Void (why?)								
PEP Cut Point: SUPM	1-2.5 □	PM-10	PM-2.5	Separ	rator T	ype: □ WINS		VSCC
PART IV – FIELD FILT	ER SHIPP	ING TO WEIG	HING LA	R	(35	SI POIDI		
Shipment Date	119/12		Affiliatio			<del></del>	PA	•
Shipped by 6.								
Tracking No. N	Tracking No. N/A Shipping Company: N/A					······································		
On completion of Part II-	V, the field :	scientist keeps or	ге сору апа	l sends	the to	o (original) copy	to the	laboratory with the filter.
PART V - WEIGHING	LABORAT							
Date Received		Received by	<u>/:</u>				Inte	grity Flag:
integrity Ort:	'es □ No	Max Tempe		°C				rozen  Cold  Ambient
The weighing laboratory	oill DATF_C	TAMP and attac	b the COC	form t	a tha r	acainina laa baak	in m	high came info in accorded

Filter Weighing and Shipping Information

8571

Filter Cassette No.

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded

PEP FIELD DATA SHEET TO BUT PQ200A

PEP Event Type: 
FRM PM-2.5 
PM-Coarse

Sampling Event Information							
AQS Site ID	TSPG	Setup Date \O\\$\12					
Site Name 'Y&B		Primary SLT San	npler Serial No. 🌾	NA			
PEP Field Scientist 6 - NO	JA(-)	PEP PQ2	200A Serial No.	597			
Parameter Check Device	Make/ Mode	1	Seri	al No,			
Multi-Standard <sup>1</sup>	BEI DELTACIM		0197				
Temperature Standard			· J				
Barometric Pressure Standard	(A)	)	-				
Flow Rate Standard	10	18115					
Time Checks OK?	y≪Yes □ No (describe)	· · · · · · · · · · · · · · · · · · ·	gagge Titler i jamen er elektrik i en meliker Timer er i e me				
Monitoring Site Criteria OK?	> Yes □ No (describe)		and the state of t				
Wontoning Site Criteria OK?	1	. (1) 1 1.	77 .7	TO SEE SEE SEE SEE SEE SEE SEE SEE SEE SE			

 $<sup>^{1}</sup>$  Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	Date: 10/18/12			
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	QQ cmH₂O	98 cmH₂O	⊠Yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	± 10 mmHg	754 mmHg	ີ S mmHg	XaYes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	21.5 ℃	ZØ.Z °C	⊠Yes □No
Filter Sensor	<u>±</u> 2°C	21.4 °C	Z1,1 °C	XDYes □No
		Flow Rate Veri	ification	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	16,94 Lpm	16.70 Lpm	`MSYes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification OK?
"Q" Check	15.83 ≤ Q ≤ 17.50	)6,94 Lpm	16.67 Lpm	Y⊒Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Ex	oosure Data				
Filter Cassette ID	19847	Cassette Retrieval Date/Time:				
PM Cut Point	PM-2.5 □ PM-10 138	10/19/12 10:54				
Elapsed Time (ET)		Filter Integrity OK? ☑ Yes ☐ No (describe)				
Total Volume (m³)	24:03					
Flow Rate (Lpm)	Q: 16.7	Avg: 6.70 CV: 6.50				
Start Date/Time	10/18/12 10:45	Data Download OK?  \(\sum_{\text{Yes}} \sum \text{No (describe)}\)				
Stop Date/Time						
Temperature (°C)	Max: 25,7	Min: 6,8 Avg: 15.0				
Bar. Pressure (mm Hg)	Max: 753	Min: 749 Avg: 751				
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :				
Trip Blank Cassette ID	12	Field Flags:				
Companion Cassette ID <sup>4</sup>	10/19/12					
Collocated Cassette ID(s) <sup>5</sup>						

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

# PEP Chain-of-Custody

Notes:

		MILL OF OM				
			•	Cassette Type	BGI Sampler Cassette	
PART I – WEIGHIN	NG LABORAT	ГORY		Filter ID No.	T2636141	
Filter V	Veighing a	nd Shipping Ir	nformatio	Weighing Lab	PM2.5 Laboratory	
Filter I	D			Analyst Name	Maddox	
Weighing La	ab			Weighing Date	10/11/2012	
Analyst/Custodia	an				Judy Maddox	Ì
Shipment Da	te			Shipped by		
Sent to (PE Or	g)		s	Shipment Date	10/11/2012	
Date This Filter M	ust be Used	bv:	Re	Airbill No.	OUT-101112	
Vormally, the weighing				Sent to (PE Org)	R-4, Greg Noah	
PART II – FIELD O	FFICE			This Filter Must be	Used by: 11/10/2012	
Date Received: (	SILLIC	Received	by: 6 1	CAH		
Package Condition	:≯© Good □	Reject (Why?)				I
lf rejected, the filter c	assette should	be returned to the w	eighing laborat	ory with the next outgoing	shipment.	
PART III – FIELD S	SITE		475			
Agency and the second of the s		Sampl	ing Event I	nformation		20 A - 10 A
Arrival D	Date at Site	10/18/12		PEP Field Scient	ist: G. NOAH	
Site Name & I	Description '	YBB				
Primary SLT PM-2	2.5 Sampler   N	/lake/Model:	(A)	Serial No.:	**	
Primary SLT PM-1	10 Sampler I	Make/Model:		ତାର / Serial No.:		
А	QS Site ID	YPB TSP1	0	POC:	· · ·	
Other Operators or	Observers			<u> </u>	•	
		Samp	ling Event	Filter Data		
Sampling Date: \	0/18/12		Retrieval Date	19110( :	Time: 10:54	
Event Filter Integrit	ty: <b>&gt;⊠</b> )OK [	□ Reject (describe	)	··	+	
Sample Type						e de la compania del compania de la compania del compania de la compania del compania del compania del compania de la compania del com
RO - Routine	□ F	B - Field Blank (R	O Cassette ID	:) □ Ot	her (describe)	
☐ CO - Collocated	PEP 🗆 E	xpired Filter (not u	used)	,	,	
☐ TB - Trìp Blank	(last RO Cas	sette ID used in a	udit trip:	)		
☐ Void (why?)						
· · · · · · · · · · · · · · · · · · ·	PM-2.5	PM-10 TSP	PM-2.5 Sepa	rator Type: □ WINS	□ VSCC \S	
PART IV – FIELD I		,,,,,		<u> </u>		
Shipment Date	10/19/17		Affiliation: (	PY ESPA		
Shipped by	SINDAT	+	Shipping Des			
Tracking No. N/A Shipping Company: N/A						
On completion of Par	t II-IV, the field	l scientist keeps one			the laboratory with the filter.	
PART V – WEIGHI	NG LABORA	TORY		<u>.                                      </u>		
Date Received		Received by:			ntegrity Flag:	
integrity Ort:	☐ Yes ☐ No				☐ Frozen ☐ Cold ☐ Ambin which same info is recorded	
ine weigning imporat	ory will DATE	DIMMIT AND AMACH	me COC form t	o me receiving iog-book, i	n wnien same injo is recorded	ι.

Filter Weighing and Shipping Information

9847

Filter Cassette No.

04-26-2011 version

PEP Event Type: 

▼ FRM PM-2.5 □ PM-Coarse

Sampling Event Information							
AQS Site ID	Setup Date 10 18 12						
Site Name		Primary SLT Sample	r Serial No.	NA			
PEP Field Scientist 6. 1	<b>JOAH</b>	PEP PQ200A Serial No.		587			
Parameter Check Device	Make/ Mode		Se	erial No.			
Multi-Standard <sup>1</sup>	BGI DELTACEL		(7)19	)			
Temperature Standard				· · · · · · · · · · · · · · · · · · ·			
Barometric Pressure Standard	Gy in lo	12					
Flow Rate Standard	10170,			<u> </u>			
Time Checks OK?	> Yes □ No (describe)						
Monitoring Site Criteria OK? ➢Yes □ No (describe)							
ITT. 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/ DOLDING I JD I	. 0 7 7 7 7 7					

Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	200A PEP Sample	Date:		
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	9 cmH <sub>2</sub> O	% cmH₂O	`≱¥es □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	754 mmHg	75S mmHg	Mayes □No
Temperature	Criteria	Ref Standard	Sampler	Verification OK?
Ambient Sensor	<u>±</u> 2°C	Z1.Z. °C	ZØ.8 °C	'⊠Yes □No
Filter Sensor	<u>±</u> 2°C	21,2 °C	Z1,Z °C	TAYes □No
		Flow Rate Veri	fication	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	17.05 Lpm	6.70 Lpm	∑Yes □No
Design Flow Rate	Criteria (±4%)	Ref Standard	Design	Verification QK?
"Q" Check	15.83 ≤ Q ≤ 17.50	17.05 Lpm	16.67 Lpm	Dores □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Ex	posure Data	
Filter Cassette ID	10322	Cassette Retrieval Date/Time:	
PM Cut Point	™PM-2.5 □ PM-10	710/19/12 10:48	
Elapsed Time (ET)	23:59	Filter Integrity OK? Ses [	□ No (describe)
Total Volume (m3)	24:03		
Flow Rate (Lpm)	Q: 16.7	Avg: 16:700 C	v: 0.52
Start Date/Time	10/18/12 10:45	Data Download OK? XYes	□ No (describe)
Stop Date/Time	10/19/12 10:45		
Temperature (°C)	Max: 26.9	Min: 7, 3 A	vg: )S, 4
Bar. Pressure (mm Hg)	Max: 758	Min: 753 A	vg: 756
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :	
Trip Blank Cassette ID		Field Flags:	
Companion Cassette ID4	C5/10/19/12		
Collocated Cassette ID(s)5			

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

 $<sup>^4</sup>$  For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** Filter Cassette No. 10322 Cassette Type **BG1 Sampler Cassette** PART I - WEIGHING LABORATORY Filter ID No. T2636148 Filter Weighing and Shipping Informatio Weighing Lab PM2.5 Laboratory Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Snipped by Judy Maddox Shipment Date 10/11/2012 Shipment Date Sent to (PE Org) Airbill No. OUT-101112 Date This Filter Must be Used by: Re Normally, the weighing laboratory completes Part I, keeps I copy and sends Sent to (PE Org) R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Received by: Date Received: G. NOAH 10/11/12 Package Condition: ▲Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: 6. NOAH 12 Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 10/18/12 Primary SLT PM-10 Sampler Make/Model: Serial No.: POC: AQS Site ID Other Operators or Observers Sampling Event Filter Data Sampling Date: IC Retrieval Date: -Time: 10148 Event Filter Integrity: ★OK □ Reject (describe) Sample Type RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP □ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: □ Void (why?) PEP Cut Point: SEOPM-2.5 □ PM-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB **Shipment Date** Affiliation: (んん Shipped by G. NOAH Shipping Destination: (4) Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag: Shipment °C l Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient Max Temperature: ☐ Yes ☐ No Integrity OK?

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

PEP Event Type: ☐ FRM PM-2.5 ☐ PM-Coarse

Sampling Event Information						
AQS Site ID YBB	106	Setup Date 10/18/12				
Site Name YES		Primary SLT Sampler Serial No. 1/6				
PEP Field Scientist 6. N	DAH	PEP PQ200A Serial No. 50		590		
Parameter Check Device	Make/ Mode	el .	Se	rial No.		
Multi-Standard <sup>1</sup>	RGI DELTACAL		0197			
Temperature Standard						
Barometric Pressure Standard	67	118/12				
Flow Rate Standard		110)				
Time Checks OK?	সু⊶Yes □ No (describe)		No. 1 To the state of the state	The state of the s		
Monitoring Site Criteria OK?	> Yes □ No (describe)	Man (1991)				

<sup>&</sup>lt;sup>1</sup> Use this line for multi-standard instruments (e.g., BGI TriCal and DeltaCal) when used for all three checks.

PQ	Date:			
Leak Check	Criteria	Beginning P	Ending P	Verification OK?
2-Minute Interval	Change < 5 cmH₂O	\⊘∫ cmH <sub>2</sub> O	(⊘⊘ cmH₂O	5×yes □No
Bar. Pressure	Criteria	Ref Standard	Sampler	Verification OK?
Ambient	<u>±</u> 10 mmHg	754 mmHg	↑S\ mmHg	AYes □No
Temperature	Criteria Z	Z Ref Standard Z	ن ا Sampler الم	Verification OK?
Ambient Sensor	<u>±</u> 2°C	16.92 °C	16.67 101°C	725¥es □No
Filter Sensor	<u>±</u> 2°C	21.3 ℃	21.4 °C	XXYes □No
		Flow Rate Veri	fication	
Audit Standard	Criteria	Ref Standard	Sampler	Verification OK?
FR (Cal.) Check	< 4% difference	6.92 Lpm	しょく Lpm	√aYes □No
Design Flow Rate "Q" Check	Çriteria (±4%)	Ref Standard	Design	Verification OK?
	15.83 ≤ Q ≤ 17.50	6,92 Lpm	16.67 Lpm	∑Yes □No

<sup>&</sup>lt;sup>2</sup> Indicate only the final result of the check after all troubleshooting has been done. Document troubleshooting in the "Notes" section below and/or in the field notebook. If troubleshooting is unsuccessful, the sampler must be recalibrated or repaired before conducting a sampling event. Fill out a new Field Data Sheet for the replacement sampler.

	PEP Exposure Data				
Filter Cassette ID	2539	Cassette Retrieval Date/Time:			
PM Cut Point ☐ PM-2.5 ➤ PM-10		10/19/12 10:48			
Elapsed Time (ET)	23:59	Filter Integrity OK? □ Yes □ No (describe)			
Total Volume (m³)	24.63				
Flow Rate (Lpm)	Q: 16.7	Avg: 16.76 CV: 0,49			
Start Date/Time	10/18/12 100:45	Data Download OK? ⊠∀es □ No (describe)			
Stop Date/Time	10/19/12 10:45				
Temperature (°C)		Min: 6.9 Avg: 15.1			
Bar. Pressure (mm Hg)	Max: 754	Min: 749 Avg: 752			
Field Blank Cassette ID		Sampler Flags <sup>3</sup> :			
Trip Blank Cassette ID	155	Field Flags:			
Companion Cassette ID <sup>4</sup>	1-1-01-2				
Collocated Cassette ID(s) <sup>5</sup>	1011112				

<sup>&</sup>lt;sup>3</sup> Make sure to add (EST) flag in "Sampler Flags" if runtime is outside of 1380- 1500 minute range.

<sup>&</sup>lt;sup>4</sup> For PM-coarse sampling event, if PM-2.5 is routine filter type, then list the companion PM-10 filter cassette ID and vice versa.

<sup>&</sup>lt;sup>5</sup> For parking lot studies, all the IDs can be listed on one form. Be sure to indicate PM cut point.

PEP Chain-of-Custody	Filter Cassette No. 2539
	Cassette Type BGI Sampler Cassette
PART I – WEIGHING LABORATORY	Filter ID No. T2635948
Filter Weighing and Shipping Information	Weighing Lab PM2.5 Laboratory
Filter ID	Analyst Name Maddox
` Weighing Lab	Weighing Date 10/11/2012
Analyst/Custodian	1
Shipment Date	Shipped by Judy Maddox
Sent to (PE Org)	Shi Shipment Date 10/11/2012
Date This Filter Must be Used by:	etu Airbill No. OUT-101112
Normally, the weighing laboratory completes Part I, keeps 1 copy and send	Sent to (PE Org) R-4, Greg Noah
PART II - FIELD OFFICE	This Filter Must be Used by: 11/10/2012
Date Received: 10 11 7012 Received by: G	NOAT
Package Condition: ➢Good □ Reject (Why?)	
If rejected, the filter cassette should be returned to the weighing lab	oratory with the next outgoing shipment.
PART III – FIELD SITE	
Sampling Ever	
Arrival Date at Site   0   18   17	PEP Field Scientist: 6, NOAH
Site Name & Description	
Primary SLT PM-2.5 Sampler Make/Model:	Serial No.:
Primary SLT PM-10 Sampler Make/Model:	18 /2. Serial No.:
AQS Site ID YBB 106	POC:
Other Operators or Observers	
Sampling Eve	nt Filter Data
Sampling Date: 10/18/12 Retrieval	Date: 1919 12 Time: (8; 48
Event Filter Integrity: MOK □ Reject (describe)	
Sample Type	
RO - Routine □ FB - Field Blank (RO Cassette	e ID:)    Other (describe)
☐ CO - Collocated PEP ☐ Expired Filter (not used)	
☐ TB - Trip Blank (last RO Cassette ID used in audit trip:	)
□ Void (why?)	
	eparator Type: □ WINS □ VSCC
PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB	
Shipment Date 101912 Affiliation:	RYEPA
Shipped by G. NOAL Shipping	Destination: (CM USB)
Tracking No. VA Shipping	Company: N/A
On completion of Part II-IV, the field scientist keeps one copy and s	ends the top (original) copy to the laboratory with the filter.
PART V – WEIGHING LABORATORY	
Date Received Received by:	Integrity Flag:
Shipment ☐ Yes ☐ No Max Temperature:	°C Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient
The weighing laboratory will DATE-STAMP and attach the COC fo	orm to the receiving log-book, in which same info is recorded.

Filter Weighing and Shipping Information

#### Filter Weighing and Shipping Information **PEP Chain-of-Custody** Filter Cassette No. 8957 Cassette Type BGI Sampler Cassette PART I - WEIGHING LABORATORY T2636135 Filter ID No. Filter Weighing and Shipping Informatio Weighing Lab PM2.5 Laboratory Filter ID Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Shipped by Judy Maddox **Shipment Date** Shipment Date 10/11/2012 Sent to (PE Org) ٤ Airbill No. OUT-101112 Date This Filter Must be Used by: R€ Sent to (PE Org) Normally, the weighing laboratory completes Part I, keeps 1 copy and sends R-4, Greg Noah PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: 10/1 Received by: Package Condition: ★ Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 101612 Primary SLT PM-10 Sampler Make/Model: Serial No. AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Retrieval Date: Sampling Date: Time: 1018/12 Event Filter Integrity: □ OK □ Reject (describe) Sample Type ☐ RO - Routine ☐ FB - Field Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP □ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: 迷Void (why?) ラブヤイム ンタス PEP Cut Point: □ PM-2.5 □ PM-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date Affiliation: \ ) Shipped by Shipping Destination: \( \) NOAH Tracking No. Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag:

Integrity OK? The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

Max Temperature:

Notes:

Shipment

☐ Yes ☐ No

#### Filter Weighing and Shipping Information PEP Chain-of-Custody F 4706 Filter Cassette No. Cassette Type **BGI Sampler Cassette** PART I – WEIGHING LABORATORY Filter ID No. T2636146 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID F Maddox Analyst Name Weighing Lab 10/11/2012 Weighing Date Analyst/Custodian T Judy Maddox Shipped by **Shipment Date** 10/11/2012 Shipment Date Sent to (PE Org) Sh Airbill No. OUT-101112 Date This Filter Must be Used by: Retu Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 R-4, Greg Noah Sent to (PE Org) PART II - FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: Received by: 12012 Package Condition: ★Good □ Reject (Why?)

If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment.

PART III – FIELD SITE		
	Sampl	oling Event Information
Arrival Date at Site		PEP Field Scientist:
Site Name & Description		
Primary SLT PM-2.5 Sampler	Make/Model:	Serial No.:
Primary SLT PM-10 Sampler	Make/Model:	Serial No.:
AQS Site ID		POC:
Other Operators or Observers	!	
	Samp	pling Event Filter Data
Sampling Date:		Retrieval Date: 60 16/18/17 Time:
Event Filter Integrity: □ OK	□ Reject (describe	pe)
Sa <del>mple Type</del>		
□ RO - Routine □	FB - Field Blank (R	RO Cassette ID:)
☐ CO - Collocated PEP ☐	Expired Filter (not a	tused) Colonia
☐ TB - Trip Blank (last RO Ca	assette ID used in a	audit trip:
MVoid (why?) EXMA FIG	JER	
PEP Cut Point:   PM-2.5	□ PM-10	PM-2.5 Separator Type: □ WINS □ VSCC

Shipment Date COCO Shipping No. NA Shipping Company: NA

On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter.

PART V -	WEIGHING	LARORA	ATORY

Date Received		Received by:	·		Integrity Flag:	
Shipment Integrity OK?	□ Yes □ No	Max Temperature:	°C	Cold Pack Condition:	☐ Frozen ☐ Cold ☐.	Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

#### Filter Weighing and Shipping Information PEP Chain-of-Custody Fe Filter Cassette No. 2415 Cassette Type **BGI Sampler Cassette** PART I - WEIGHING LABORATORY Filter ID No. T2635947 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID Fi Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian Τí Shipped by Judy Maddox Shipment Date Shipment Date 10/11/2012 Sent to (PE Org) Shi Airbill No. OUT-101112 Date This Filter Must be Used by: Retu Sent to (PE Org) Normally, the weighing laboratory completes Part I, keeps 1 copy and sends 2 R-4, Greg Noah This Filter Must be Used by: PART II - FIELD OFFICE 11/10/2012 G NOAH Date Received: Received by: Package Condition: ASGood □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: 10/18/12 Primary SLT PM-10 Sampler Make/Model: Serial No. AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Retrieval Date: Sampling Date: Time: 10/8/12 Event Filter Integrity: □ OK □ Reject (describe) Sample Type ☐ RO - Routine □ EB - Field Blank (RO Cassette ID: □ Other (describe) ☐ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: EXTRA FILTER 7≰ Void (why?) PEP Cut Point: ☐ PM-2.5 ☐ PM-10 PM-2.5 Separator Type: □ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date \\O\IQ\(\C\) Affiliation: YU Shipped by G. NOAH Shipping Destination: Tracking No. N/A Shipping Company: On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY Date Received Received by: Integrity Flag:

Integrity OK? The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.

°C

Max Temperature:

Notes:

Shipment

☐ Yes ☐ No

Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient

#### **Filter Weighing and Shipping Information** PEP Chain-of-Custody Filter Cassette No. 1525 Cassette Type BGI Sampler Cassette PART I – WEIGHING LABORATORY Filter ID No. T2636147 Filter Weighing and Shipping Information Weighing Lab PM2.5 Laboratory Filter ID Analyst Name Maddox Weighing Lab Weighing Date 10/11/2012 Analyst/Custodian **Shipment Date** Shipped by Judy Maddox Sent to (PE Org) Shipment Date 10/11/2012 S Date This Filter Must be Used by: Re Airbill No. OUT-101112 Normally, the weighing laboratory completes Part I, keeps I copy and sends Sent to (PE Org) R-4, Greg Noah PART II – FIELD OFFICE This Filter Must be Used by: 11/10/2012 Date Received: 10(11) Received by: Package Condition: **∠**Good □ Reject (Why?) If rejected, the filter cassette should be returned to the weighing laboratory with the next outgoing shipment. PART III - FIELD SITE Sampling Event Information Arrival Date at Site PEP Field Scientist: Site Name & Description Primary SLT PM-2.5 Sampler Make/Model: Serial No.: Make/Model: 10/18/12 Primary SLT PM-10 Sampler Serial-No.: AQS Site ID POC: Other Operators or Observers Sampling Event Filter Data Sampling Date: Retrieval Date: Time: Event Filter Integrity: OK Reject (describe) Sample Type ☐ RO - Routine ☐ FB - Field-Blank (RO Cassette ID: ☐ Other (describe) □ CO - Collocated PEP ☐ Expired Filter (not used) ☐ TB - Trip Blank (last RO Cassette ID used in audit trip: EXMA FILTER ϪVoid (why?) PEP Cut Point: □ PM-2.5 □ PM-10 PM-2.5 Separator Type: ☐ WINS □ VSCC PART IV - FIELD FILTER SHIPPING TO WEIGHING LAB Shipment Date Affiliation: 104 Shipped by & NOAH Shipping Destination: (ムム Tracking No. N Shipping Company: N/A-On completion of Part II-IV, the field scientist keeps one copy and sends the top (original) copy to the laboratory with the filter. PART V - WEIGHING LABORATORY

Date Received	Received by:		Integrity Flag:
Shipment ☐ Yes	s □ No Max Temperatur	re: °C	Cold Pack Condition: ☐ Frozen ☐ Cold ☐ Ambient

The weighing laboratory will DATE-STAMP and attach the COC form to the receiving log-book, in which same info is recorded.